

• FEBRUARY 1959

BUTANE-PROPANE

A CHILTON PUBLICATION

News

Here's how one
appliance distributor
earns his keep

Guarding your capital

HEADQUARTERS FOR L.P. GAS INFORMATION SINCE 1931



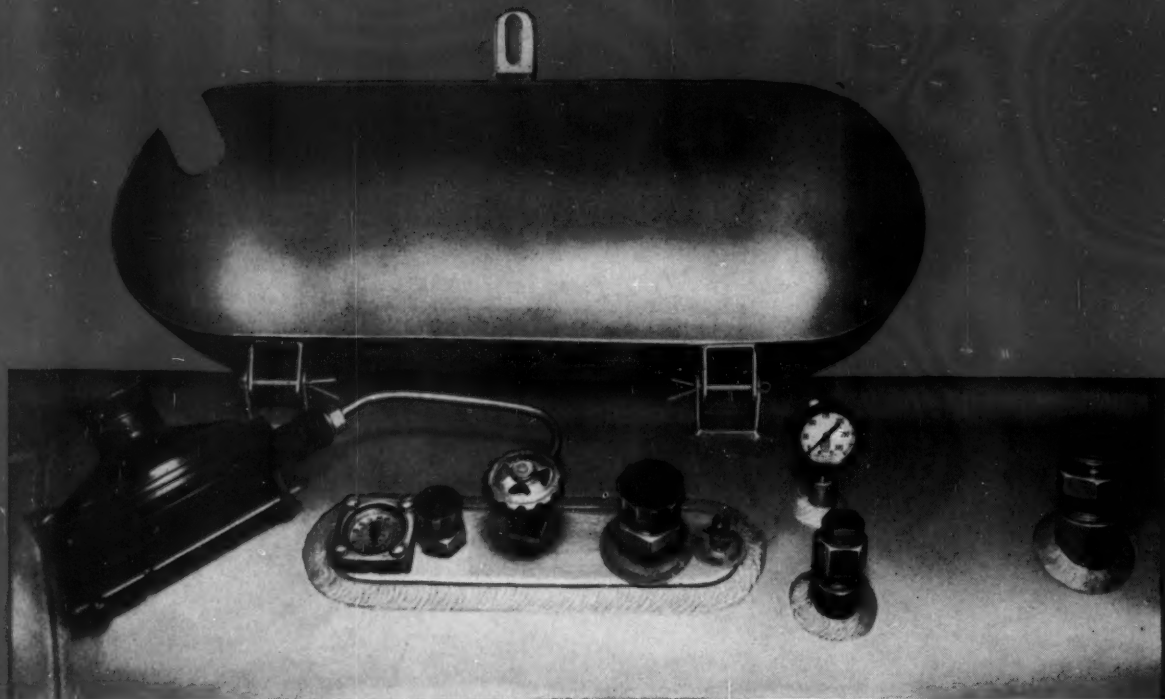
DISTRICT OFFICES:

Williamsburg, Virginia
Moorhead, Minnesota
Salt Lake City, Utah
Billings, Montana
Des Moines, Iowa
Russell, Kansas
Houston, Texas
Midland, Texas
El Dorado, Arkansas

TULOMA GAS PRODUCTS COMPANY

Pan American Building • Phone CHerry 2-3261 • Tulsa, Oklahoma

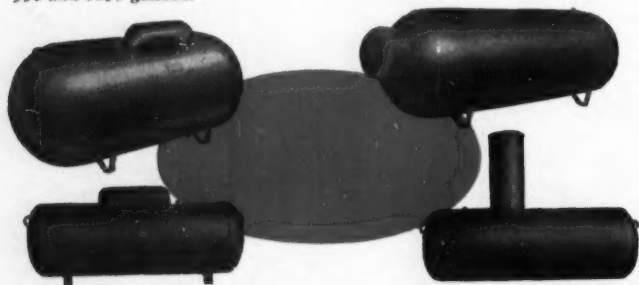




Controlled tests prove:
Hackney system tanks
provide faster filling

Model S37-499—shoulder-mounted, 500-gallon system. Shoulder mounting means easier servicing. Other shoulder-mounted capacities: 640, 995 and 1135 gallons.

Model E37-499—end-mounted, 500-gallon system. Other end-mounted capacities: 640, 995, 1745, 2550 and 3360 gallons.



Model T30-250—top-mounted, 250-gallon system. Other top-mounted capacities: 320, 499 and 995 gallons.

Model U30-250—underground, 250-gallon system. Other underground tank capacities: 320, 499 and 995 gallons.

Individual single-purpose, best quality valves and gauges are conveniently located for most efficient servicing. Hose connections can be made quickly. Gauges are easy to read. Separate filler valve on shoulder- and top-mounted tanks fill straight into vapor phase. *Controlled tests have proved this to be the fastest filling arrangement.* A separate opening with Chek Lok excess flow valve provides for liquid withdrawal.

More Hackney LP-Gas
System Features

Seamless streamlined hood. Sturdy and attractive. Protects fittings from weather, damage, tampering.

Superior welds. Made automatically. Sound, neat—X-ray controlled for safety.

Thoroughly tested. Meet, exceed ASME requirements and NBFU regulations. Carry UL listing.

Ready for use. All fittings installed. Interiors cleaned, dried. Long-lasting paint sprayed on exterior.

Write for complete information on Hackney LP-Gas system tanks.



Pressed Steel Tank Company

Manufacturer of Hackney Products

1487 South 66th Street, Milwaukee 14, Wisconsin

Branch offices in principal cities



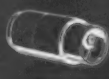
cylinders



systems



fuel tanks for trucks and tractors



lift truck tanks



tank trucks



transports



bulk storage tanks

LP-GAS CONTAINERS FROM ONE POUND TO 30,000 GALLONS

does your operation have a storage capacity problem?



**vapor
metering
will improve your
profit picture**

Does your operation have a storage capacity problem? Vapor metering will increase your storage capacity considerably by allowing you to make full use of customer's tanks. This is a big advantage especially when extra truck time is available or when you can get a price break on fuel.

Many operators have made the economy and convenience of vapor meters the hub around which to build and increase their businesses—profitably. Get full facts now. Write for "tell-all" bulletin ADV-41, Rockwell Manufacturing Company, Pittsburgh 8, Pa.



Safe — Economical — Convenient

The Rockwell vapor meter is made with a strong, impact-resistant outer housing of pressure cast aluminum alloy. It's rust-proof, corrosion-resistant. Mounting brackets are supplied to simplify installation.



Through the years only one burner has remained America's *Favorite*

INSTANT FULL FLAME

Famous "2 in 1" dual throat burner that provides measured heat... brings food to cooking temperature in shortest possible time.



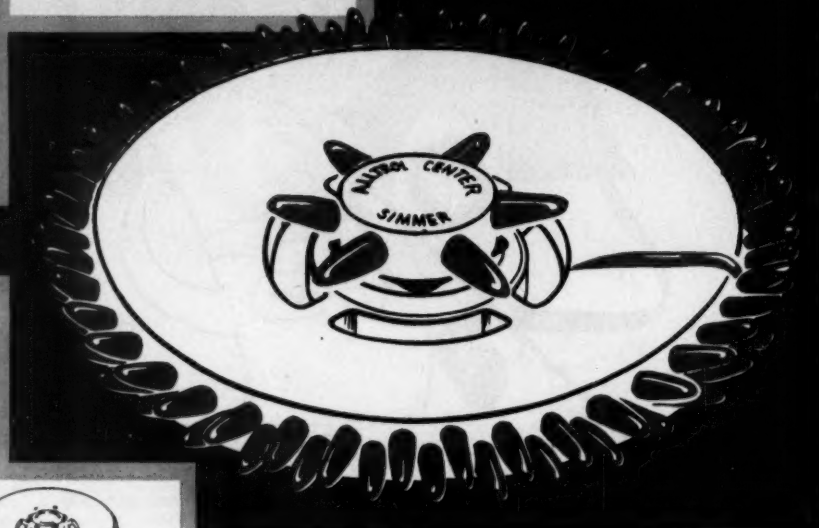
"CUCK"...convenient Low Fry heat for uniform browning or frying.



"CUCK"...efficient Center Simmer maintains boiling in any covered utensil.

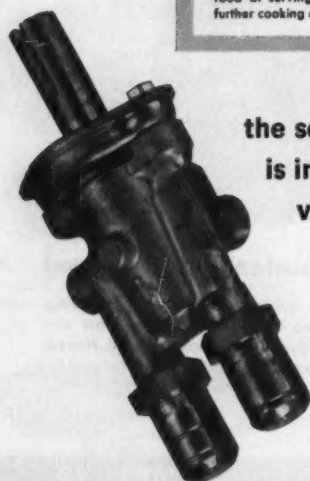


"CUCK"...Keep-Warm heat keeps food at serving temperature without further cooking or loss of food flavors.



HARPER ALLTROL®

THE ORIGINAL *center simmer burner*



the secret
is in this
valve!

Here's the burner that both mother and daughter can agree on! And while Harper engineers have developed many more recent innovations, the Alltrol Center Simmer burner *still* remains first choice among homemakers.

But then—is it any wonder this "measured heat" burner is so popular? It's simple and easy to use... clean, cool and thrifty... assures a lifetime of cooking triumphs.

Isn't it time (under today's competitive situation) to insist on these sales-producing burners for ALL your gas ranges—not just your deluxe ones?

Write for free sales demonstration book.

HARPER-WYMAN COMPANY

Dept. 29-B 8550 Vincennes Ave. Chicago 20, Ill.



BUTANE-PROPANE News



A CHILTON PUBLICATION

EDITORIAL

WILLIAM W. CLARK: EDITOR

Martin A. Brower: Managing Editor
Lynn C. Danny: Associate Editor
William T. Harper: Eastern Editor
Mary Lou Harrington: Assistant Editor
Lester L. Luzon: Technical Editor
Raymond A. Grote: Art Editor
Nell R. Regimbal: Washington Editor
Gerald N. Smith: Research
Robert Gunning: Readability Consultant

BUSINESS

FRANK M. CHAPMAN: PUBLISHER

Gilbert Bowman: Promotion Manager
Roberta Conway: Advertising Production
M. A. Kesterson: Circulation Manager

ADVERTISING OFFICES

New York (17), 100 E. 42nd St.
Joseph R. Geryk, OXFORD 7-3400

Chicago (1) 360 N. Michigan Ave., Suite 418
Richard L. DeMuey, RANDOLPH 6-2166

Cleveland (15) 930 S. F. Keith Bldg.
Howard Baird, SUPERIOR 1-2860

Dallas (6) 189 Meadows Bldg.
William J. Smyth, EMERSON 8-4751

San Francisco, 1355 Market St.
Frank McKenzie, UNDERHILL 1-7737

Los Angeles (57) 198 So. Alvarado St.
Larry Jackson, DUNKIRK 7-4337

BUTANE-PROPANE News is published monthly. Copyright 1959 by Chilton Company, Chestnut and 54th Sts., Philadelphia 29, Pa. Subscription price: United States, U. S. possessions and Canada: 50¢ per copy; one year, \$2; two years, \$3. Mexico, South and Central America, Caribbean area: one year, \$3; two years, \$5. All other countries, \$10 per year. Second Class postage paid at Phila., Pa. Member of Liquefied Petroleum Gas Association, National Fire Protection Association. Available on microfilm.

JOS. S. HILDRETH, Board Chairman
G. C. BUZBY, President

Vice Presidents: P. M. Fahrendorf, Leonard V. Rowlands, George T. Hook, Robert E. McKenna, Treasurer, William H. Vallar; Secretary, John Blair Moffett; Directors: Maurice E. Cox, Frank P. Tighe, Everitt B. Terhune, Jr., Russell W. Cope, Jr., John C. Hildreth, Jr.

Stanley Appleby, Comptroller

Editorial and advertising offices:
198 So. Alvarado St., Los Angeles 57
Phone DUNKIRK 7-4337



BUTANE-PROPANE News

Volume 21-Number 2

CONTENTS

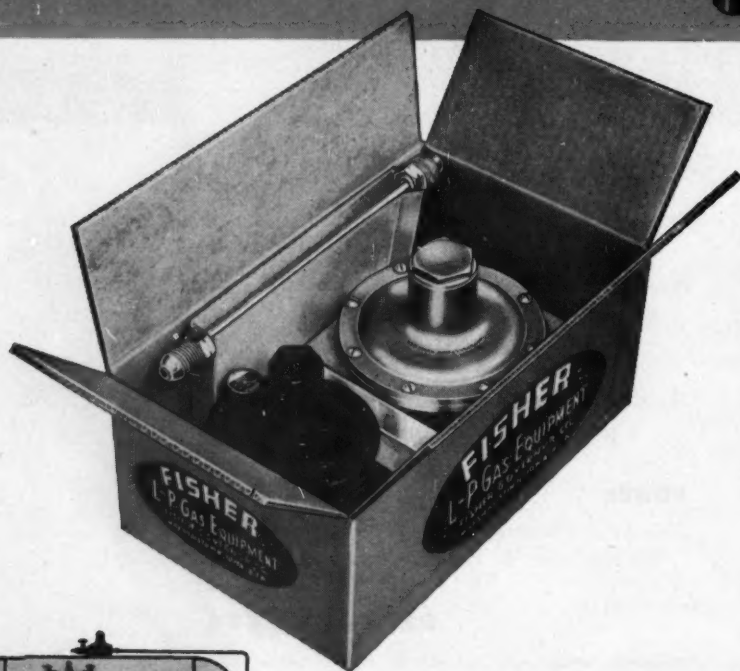
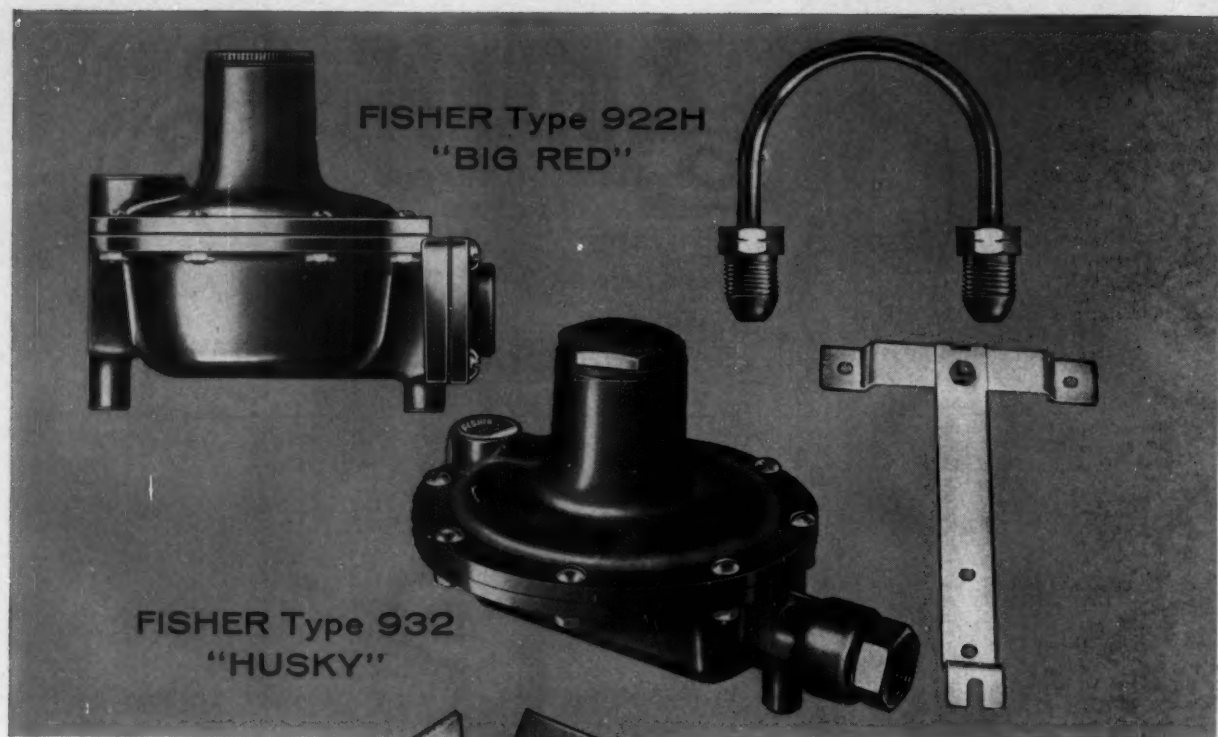
Indiana appliance distributor— Bryant-Hedback earns its keep.....	19
<i>Martin A. Brower</i>	
How to protect your capital and make it grow—Part 2 Safeguarding your capital accumulation.....	24
<i>J. Gordon Allard</i>	
Highway asphalt plants offer huge LPG market.....	29
<i>Ken Kirkpatrick</i>	
LPG for plumbers—only	33
<i>William Clark</i>	
In the British Isles— LPG is a jolly good fuel, old chap.....	36
<i>W. S. Amos</i>	
What the serviceman should know about L. P. gas clothes dryer controls—Part 1	42
<i>E. W. Wechsler</i>	
How radio gives Model Gas an 'office on wheels'.....	50
<i>William T. Harper</i>	
POWER	
Industrial Propane Corp.— We specialize in forklift fuel.....	81

DEPARTMENTS

Advertisers' Index	90	Letters	9
Associations	66	News	54
Beyond the Mains	17	Power	81
Calendar	12	The Trade	68
Classified	88	Washington Report	14

What's New in Products and Trade Literature.. 72

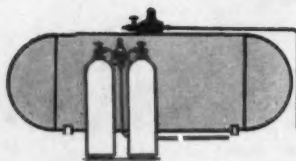
Two Stage Regulation benefits



Ready to go!

EVERYTHING YOU NEED IN ONE PACKAGE

Installation of two-stage regulation becomes a simple matter with the Fisher all-in-one packaged system. Here in one carton you have the regulators and accessory equipment you need to complete the job. No time wasted looking for missing items. Fisher packaging of this entire system makes your job easier —makes every two-stage regulation installation less costly.



IF IT FLOWS THROUGH PIPE ANYWHERE IN THE WORLD . . . CHANCES ARE IT'S CONTROLLED BY . . .

both you and your customers

- 1 **BETTER APPLIANCE PRESSURE**
- 2 **REDUCTION OF FREEZING PROBLEMS**
- 3 **SMALLER PIPING FROM TANK TO HOUSE**
- 4 **FEWER SERVICE CALLS TO MAKE**
- 5 **INCREASED GOODWILL FOR LP GAS**

Gives LP Gas a chance to deliver all of its advantages to your customer

If you want greater volume, better profits and future growth, you can't let competitive fuels outsell you on service.

Check up on customer complaints and service calls. Are you trying to satisfy the growing demand with single stage regulation?

The mechanics of reducing tank pressures to 11" W.C. with a single regulator often creates problems which lead to dissatisfied customers and needless service expense.

Check your customers now, find the source of frequent complaints. Then put in a two-stage system. You'll note the abrupt drop in service calls due to low appliance pressure, freeze-ups and leakage.

All it takes is the Fisher Type 922H set for 10 to 15 pounds for the first stage. For the second stage, put on a Fisher Type 932 set for 11" W.C. it's as simple as that!

Remember, competitive fuels are waging a constant battle for your customer's preference—don't give 'em a chance to chisel in!

FOR FURTHER DETAILS WRITE FOR CATALOG LP-7.



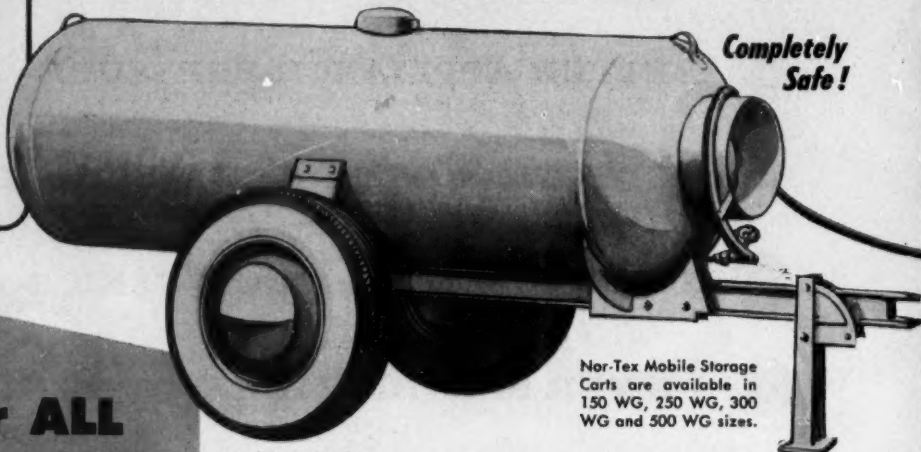
SINCE 1880

FISHER GOVERNOR COMPANY
Marshalltown, Iowa

BALANCE YOUR LOAD THE

POPULAR Nor-Tex Mobile Storage

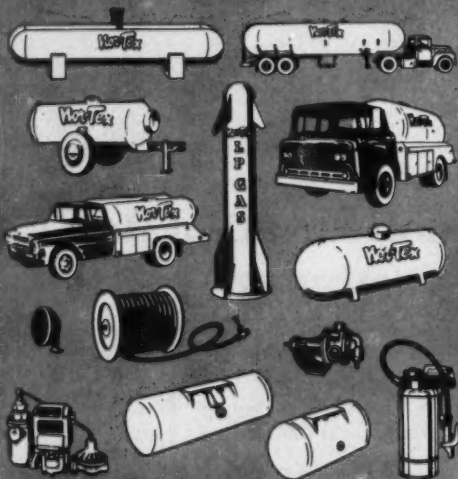
Well-baffled... Easy to "spot" with car, truck or tractor. Safely place your fuel right where you need it! Heavy duty axle with standard Chevrolet hub and 15" wheels. I-beam tongue... Recessed relief valve... 1 1/2" hose... and 3/4" OIC valve and coupling.



Completely Safe!

Nor-Tex Mobile Storage Carts are available in 150 WG, 250 WG, 300 WG and 500 WG sizes.

LOOK TO Nor-Tex For ALL Your LPG NEEDS



WRITE, WIRE
OR PHONE
FOR PRICES



National Sales Agents for

Hitch Your Profits
To A Nor-Tex STAR



Internal Relief Valve
On All STAR Systems

DOMESTIC TANKS

Built to last a lifetime! The safest, finest quality tank you can buy. Satisfaction guaranteed. Built to meet all national, state and local codes. Buy one or a carload.



Nor-Tex ROCKET

Boosting Sales Everywhere

Everyone is talking about the excellent Nor-Tex attention-compelling, sales-boosting LPG Service Station... flexible to any type of installation... occupies only 72" diameter.

May We Help You?

Interested attention, experienced assistance and helpful suggestions are yours for the asking.

HAUL EXTRA GALLONS

**Nor-Tex
STANDARD
TWIN**

DELIVER MORE GALLONS

**Nor-Tex
PAYLOAD
SPECIAL**

WORK FEWER HOURS

**Nor-Tex
CUSTOM
TWIN**

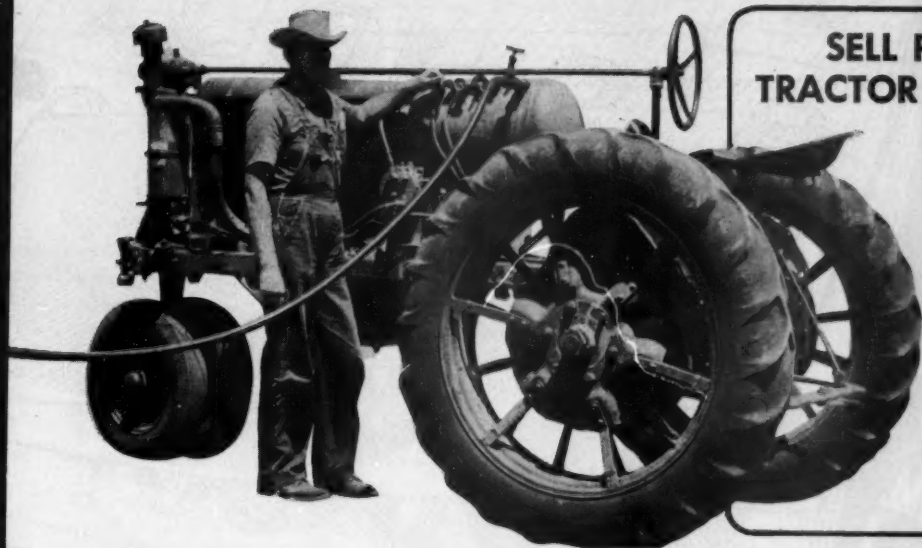
DRIVE LESS MILES

**Nor-Tex
DE LUXE
TWIN**

EARN MORE MONEY

NORTH TEXAS

PROGRESSIVE *Nor-Tex* WAY



SELL PROFITABLE TRACTOR CONVERSIONS

Balance your load by telling the advantages of LP-Gas in Internal Combustion Engines. It will help you sell conversions of all types of mobile and stationary equipment. Conversions save up to 60% on fuel. Oil consumption is reduced 80%. Engine wear reduced 75%. Oil dilution and carbon deposits eliminated. 2 to 1 engine life ratio. Replacement of parts practically nil. There are 78 Nor-Tex custom models available in 62 sizes. Tell their benefits and you'll sell them.

4 BIGGER PAYLOAD *Nor-Tex* DELIVERY UNITS

2500 WG Units Now Weigh Under 23,000 lbs. Loaded!

Every bulk plant operator is interested in these four new, sleek, LIGHTWEIGHT, streamlined, twin or single barrel Nor-Tex LPG Delivery Units with their high flow plumbing. Even 3000 WG units and over are within the 18,000 lb.

axle limit. For day in, day out efficiency, durability, payload, fast loading, high rated delivery, perfect balance and appearance Nor-Tex delivery equipment can't be beat. Nor-Tex engineering has greatly reduced over-all weight.

Aluminum Skirting and Cabinets



You can now haul

MORE GAS and LESS STEEL

Than ever before!

--- FILL IN - ATTACH TO POSTCARD - MAIL TODAY --- 2

Without obligation please send the following:

(Check Which) ☐ PRICES ☐ Complete DETAILS Regarding

☐ TRUCK TANKS ☐ TRUCK CHASSIS ☐ TRANSPORTS

☐ MOBILE STORAGE ☐ PONIES ☐ DOMESTIC TANKS

Firm _____

Address _____

City _____ Zone _____ State _____

Signed _____ Title _____

Ideal In States
Imposing
Ton Mile Tax

Extra Savings!
We Are Truck Distributors!

Nor-Tex
LOW COST
LPG
Financing

A PLAN TO MEET EVERY NEED!

TANK CO.

P. O. BOX 1219
DENTON, TEXAS
DUpont 2-5416

Warm
weather
is only
a few
months
away!



PLAN *Now* TO BUILD THAT SUMMER LOAD

Avail yourself of Warren's many facilities designed to help YOU obtain and hold more Summer Business.

SALES OFFICES:

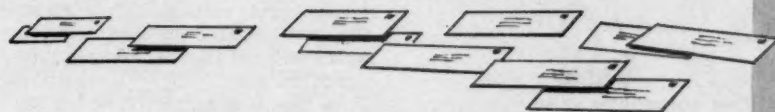
LOS ANGELES, CALIFORNIA
OMAHA, NEBRASKA
LOUISVILLE, KENTUCKY
FT. WORTH, TEXAS
MIDLAND, TEXAS
HOUSTON, TEXAS
NEW YORK CITY, NEW YORK
BRYN MAWR, PENNSYLVANIA
ST. LOUIS, MISSOURI
COLUMBIA, SOUTH CAROLINA
TAMPA, FLORIDA
JACKSON, MISSISSIPPI



WARRENGAS
the Concentrated fuel



WARREN PETROLEUM
TULSA, OKLAHOMA



BPN



Letters

Heating crankcases keeps oil warm

Illinois

In the Butane-Propane Power Manual, 1952 edition, on page 279, the author mentions electric resistance heaters for direct heating of crankcases and also 110 volt electric water heaters for radiators. Can you give me more information on this, or a source thereof?

We have several propane transport tractors which are parked out in the weather. These are International RP-195's and large Fords. I am looking for a device to keep the crankcase oil (number 40) in a "warm" condition so that with a few minutes running in cold weather the oil circulation would be normal. The water heater has possibilities along the same line also.

R. R. S.

There are several companies which manufacture both types of heaters. We suggest you contact your International dealer. He should know about the equipment and which is factory recommended for your trucks. —Ed.



Converted boiler must heat water and buildings

South Dakota

I have a customer who is planning a Washaterra with a maximum of 20 8-lb washers and wants to heat the building with hot water which is 22 x 60 ft. He thinks 700 gal per hour is sufficient to handle this. He has a 10 hp stoker-fired flueless boiler he would like to convert to L. P. gas and use for water heating. A 250 gal. storage tank will also be used.

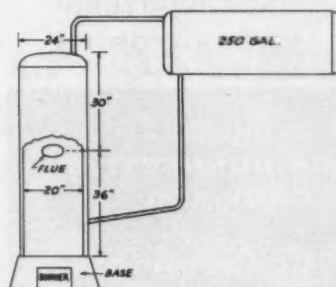
Our water in the winter is 45-48 deg. and he wants it raised to 180

deg. Below is a sketch of the boiler and tank installation and I would appreciate it if you would give me the amount of water we could get and the size of burner needed for this boiler. Also would this boiler be efficient on propane?

N. N. W.

Since we do not know the details of construction of this building, and cannot make an accurate estimate of the heat loss, our figures on space heating must be based on assumptions. The actual requirement might be more or less.

Based on an insulated, unvented



attic over the ceiling, concrete slab floor, average frame, brick veneer or stucco with lath and plaster walls, two doors, and six windows with storm windows, we estimate a heating load of about 90,000 Btu per hour.

An 8 lb washer will use about 25 gal. (some makes use less, some use more) of 160 deg. F water per hour. Normal wash and rinse water temperature is 160 deg. F where automatic temperature control valves are on washers. Therefore, the 180 deg. F temperature water is tempered with cold water. The average cycle is 33 minutes plus 10 minutes for emptying, cleaning, and refilling the washer with clothes and soap. Then 20 washers, working at maximum rate would use about 700 gal or 5835 lb of water per hour. It will require about 650,000 Btu per hour to heat the water. This makes a total output demand of 740,000 Btu per hour on the

boiler for space heating and water heating.

It is difficult to say how much heat can be recovered from a converted coal fired boiler, because the method of rating boilers in horsepower is indefinite. Ten boiler horsepower represents about 330,000 Btu per hour output. It is possible that more heat than this can be developed by this boiler. We have no way of knowing. We suggest you contact the boiler manufacturer and obtain his recommendation on capacity, gas burner, baffling and brick work changes for converting the boiler. They can also advise how much water the boiler is capable of heating.

Most boilers if properly converted in accordance with the manufacturer's recommendation, will operate quite efficiently on gas.

It appears that the boiler will not be large enough to meet the peak demand. There are several L.P. gas fired, AGA approved, high efficiency, booster water heaters on the market designed for this type of service. We suggest you check the advertisements in our magazine for their names. —Ed.



Too much primary air may cause flash back

Kansas

We are having trouble with some of our space heaters. We have a few of them which burn back in the orifices. What adjustment can be made on these heaters so that we can correct this condition?

M. A. J.

The flash back and burning at the orifice may be due to several things. Some are as follows:

1) Improper adjustment of the air shutter. Too much primary air may produce a mixture that has a high flame velocity that will flash back through the burner port. The trouble

may be overcome by reducing the amount of primary air to the burner. (Closing the air shutter some).

2) Are the heaters tested and approved for use with L. P. gas by the American Gas Association? If they are not, it is quite possible the burner design is unsatisfactory.

3) Even though a heater carries AGA approval for use with natural gas, the burner may not be entirely suitable for L. P. gas. The appliance should carry the AGA approval for the fuel it is to use.

If you advise us the manufacturer's name and model numbers of the ap-

pliances which are giving you the trouble we may be able to furnish more definite information about the equipment.—Ed.



Ether sometimes used with propane for steel cutting

Canada

We have had an unusual request from one of our accounts, on which we would appreciate your comments.

We are supplying this customer with propane, which is used for steel cutting. They are associated with an American concern using propane for cutting. They claim they buy propane with an additive which will reduce their oxygen consumption.

As this is a matter of which we have never heard, please advise.

T. A.

Acetylene Co., Chicago, Ill., USA, does make and sell a propane with approximately 15 per cent ether. The gas is a patented product and is widely distributed.

Although it does cost less than acetylene, it costs several times more than propane. We have seen no test results on use of the product, so cannot say at this time whether the saving in oxygen will pay for the increased cost of the other gas.—Ed.



L.P. gases not poisonous

Canada

Is propane carbon monoxide, and poisonous?

Is natural gas poisonous?

With natural gas selling at \$2.55 a thousand cu ft, at what price should I sell a 100 lb. cylinder of propane, to be equivalent?

D. A. L.

Carbon monoxide is very poisonous. Small quantities of it breathed into the lungs will cause death in a short time. This gas is an incomplete product of combustion and is formed when a deficiency of oxygen or air is available for combustion. That is why adequate ventilation must be provided for fuel burning equipment to receive enough air for complete combustion.

Carbon monoxide should not be confused with carbon-dioxide, the non-poisonous, complete product formed when burning fuels.

L. P. gases (propane and butane) and natural gas are not poisonous. However, if they are allowed to escape into a closed room they can gradually dilute the air and could cause suffocation because of lack of oxygen.

It requires about 11 gal. of propane to deliver the same amount of heat as 1000 cu ft of natural gas. Then $\$2.55 \div 11 \text{ gal.} = 23.2 \text{ cents per gal.}$ the equivalent price for propane. 100 lb of propane is 23.6 gal. at 4.23 lb per gal. (weight when measured at 60 deg. F). Then a 100 lb cylinder should sell for about \$5.50 to be equivalent in price.—Ed.

Eliminates
Hazard
of Leakage
or Spillage



APPROVED BY
UNDERWRITERS'
LABORATORIES

3-GRL1621
QUICK-CONNECTIVE
COUPLING

For L. P. Gas Line Connections



DISCONNECTED

Closed valves in Socket and Plug provide positive shut-off on both sides of line.



PARTIALLY ENGAGED

Coupling sealed by O'Ring — while valves remain closed. No possibility of premature flow or leakage.



FULLY ENGAGED

With Socket and Plug fully engaged to insure positive, foolproof connection, valves open to permit free flow of gas.

Specifically designed for L.P. gas line connections, Hansen GRL Couplings completely eliminate the hazard and annoyance of leakage or spillage of gas. To connect (no tools required), you merely push the Plug into the Socket — all the way. To disconnect, just turn sleeve — Coupling instantly and automatically shuts off both ends of line.

Sockets available with 1/4" female pipe threads. Plugs available with 3/8" female pipe threads.

Write for descriptive literature

SINCE 1915



QUICK-CONNECTIVE FLUID LINE COUPLINGS

THE HANSEN

MANUFACTURING COMPANY

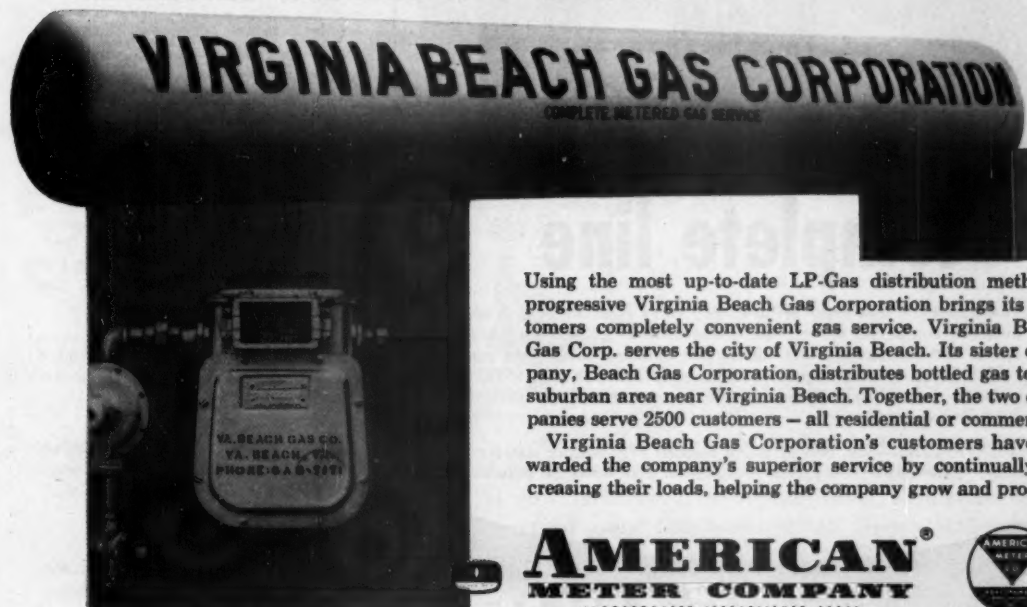
4031 WEST 150th STREET • CLEVELAND 35, OHIO



Handsome new Convention Hall at Virginia Beach is heated and air-conditioned with LP-Gas. American 80B Ironcase Meter, with Reliance type HPH Regulator, measures the gas that keeps conventions and large meetings comfortable all year 'round. LP-Gas cooking facilities are also being installed in the municipally-built hall.



AMERICAN® LP-GAS METERS BUILD LOADS FOR...



Using the most up-to-date LP-Gas distribution methods, progressive Virginia Beach Gas Corporation brings its customers completely convenient gas service. Virginia Beach Gas Corp. serves the city of Virginia Beach. Its sister company, Beach Gas Corporation, distributes bottled gas to the suburban area near Virginia Beach. Together, the two companies serve 2500 customers — all residential or commercial.

Virginia Beach Gas Corporation's customers have rewarded the company's superior service by continually increasing their loads, helping the company grow and prosper.

AMERICAN®
METER COMPANY
INCORPORATED ESTABLISHED 1939



Attractive, lightweight Aluminumcase Meters bring "city-type" gas service to Virginia Beach, Virginia. AL-110 meters build customer confidence throughout Virginia Beach Gas Company's 26 miles of distribution lines within the city. The company distributes about 800,000 gallons of propane each year through underground gas mains.

GENERAL SALES OFFICE: Philadelphia 16, Penna. • Albany • Alhambra • Atlanta • Baltimore • Birmingham • Boston • Chicago • Dallas • Denver • Erie • Houston • Kansas City • Los Angeles • Minneapolis • New York • Omaha • Pittsburgh • San Francisco • Seattle • Tulsa • Wynnewood
IN CANADA: Canadian Meter Company, Ltd., Milton, Ontario • Calgary • Edmonton • Regina
SUPPLIERS TO THE GAS INDUSTRY for Ironcase, Tinned Steelcase, Aluminumcase, and Welded Steelcase Meters • American-Westcott Orifice Meters • Instruments • Reliance Regulators • Apparatus • Valves



NEW LP GAS-FIRED MONEY MAKER

the Johnson Radiant Pig Blanket

specially designed to keep pigs warm and dry in winter

Now you can offer hog raisers a brooder heater that takes the gamble out of winter farrowing. The Johnson Radiant Pig Blanket keeps two litters warm and dry in the worst winter weather. Lets the farmer farrow in the winter and get hogs to market when prices are highest.

Radiant Pig Blankets are good money-makers for you too. They're popularly priced at \$43.95, every hog raiser can afford them. And since they're fueled by LP gas, you have a good bottle gas customer with every Pig Blanket you sell.

Get in on the sure fire sales and profit that are yours with the Johnson Radiant Pig Blanket. Advertising and promotion aids are yours free.

Write today for complete information.



complete line

Reznor dealers don't lose sales because they can't meet the specs, or can't match available equipment to job requirements. Reznor gives them everything they need to sell gas heating to business and industry. Suspended gas unit heaters (both fan and blower types) in 11 sizes—25,000 to 300,000 BTU. Duct furnaces for system capacities from 50,000 to several million BTU. Room heaters in four popular sizes.

COMPLETE LINE—just one of many reasons why Reznor dealers make more sales . . . and more money. Ask your Reznor distributor for details.



Reznor Manufacturing Company, 4 Union Street, Mercer, Pa.

CALENDAR

**Coming events
in the industry**

1959

January 26-28—65th Annual Meeting of the American Society of Heating and Air Conditioning Engineers and the 14th International Heating and Air Conditioning Exposition under the auspices of ASHAE—Bellevue-Stratford Hotel, Philadelphia, Pa.

February 17-19—Wisconsin LPGA Management School—University of Wisconsin, Madison, Wisc.

March 8-10—Indiana LPGA Trade Show and Convention—Claypool Hotel, Indianapolis, Ind.

March 11-13—Gas Display, Virginia Home Economics Convention, Roanoke, Va.

March 15-17—Ohio LPGA Convention and Trade Show—Sheraton-Gibson Hotel, Cincinnati, Ohio.

March 17-19—Pennsylvania LPGA Management Conference—Pennsylvania State University, University Park, Pa.

March 30-31—Iowa LPGA Convention—Kirkwood Hotel, Des Moines, Iowa.

April 1-3—Southeast District LPGA Convention and Trade Show—Atlanta-Biltmore Hotel, Atlanta, Ga.

April 9-11—Western Liquid Gas Association Tenth Annual Convention and Trade Show—St. Francis Hotel, San Francisco, Calif.

April 12-13—Nebraska LPGA Annual Convention—Hotel Yancey, Grand Island, Neb.

April 12-14—Mississippi LP-Gas Dealers Association Annual Convention—Edgewater Gulf Hotel, Edgewater Park, Miss.

April 19-20—Kansas LPGA 14th Annual Convention and Business Meeting—Allis Hotel, Wichita, Kansas.

April 20-23—Texas Butane Management Institute—Sponsored by the University of Texas—Fort Clark Guest Ranch, near Brackettville, Texas.

All associations are invited to send in dates of their forthcoming meetings for this calendar.

May 3-5—Liquefied Petroleum Gas Association 28th Annual National Convention and Trade Show—Conrad Hilton Hotel, Chicago.

May 26—Maryland LPGA Annual Convention—Lord Baltimore Hotel, Baltimore, Md.

June 7-9—Northwest District LPGA Convention—Portland, Ore.

June 8-10—Missouri LPGA and Illinois LPGA Joint Convention and Trade Show—Known as the Mo-Ill L. P. Gas Exposition—Sheraton-Jefferson Hotel, St. Louis, Mo.

June 14-16—Arkansas LPGA Annual Convention.

June 24-26—Texas Butane Dealers Association Convention and L. P. Gas Market—Adolphus Hotel, Dallas, Texas.

August 2-4—Kentucky LPGA Annual Convention and Trade Show—Kentucky Hotel, Louisville, Ky.

August 2-4—Alabama LPGA Annual Convention—Birmingham, Ala.

August 9-14—L. P. Gas Conference—Sponsored by the Florida LPGA—University of Florida, Gainesville, Fla.

August 16-18—Nevada, Idaho, Utah Joint Convention and Trade Show—Holiday Hotel, Reno, Nev.

September 13-15—North Carolina LPGA Annual Meeting and Convention—Sir Walter Raleigh Hotel, Raleigh, N. C.

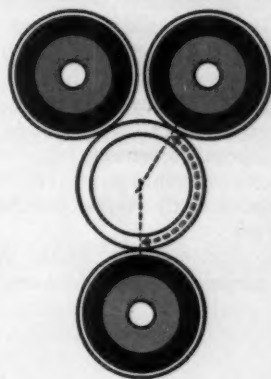
September 17—Pennsylvania LPGA Convention—Cocoa Inn, Hershey, Pa.

October 12-14—Northeast Regional LPGA Convention and Trade Show—Sheraton-Park Hotel, Washington, D. C.

New extra-fast cutting RIGID No. 315 Tubing Cutter



**3-Wheel
Design**
gives quick, clean cuts
even in tightest places!



Compact and light, yet strong, this new No. 315 **RIGID** 3-Wheel Tubing Cutter is extra handy on every job. Just what you need for that hard-to-get-at tubing. No skinned knuckles . . . no slow hack saw. Cuts copper, brass, aluminum, steel tubing and thin-wall conduit. Handy **RIGID** fold-in reamer protects hands and pockets. Try the new **RIGID** No. 315 and you'll wonder how you got along without it. Ask your Supply House today.

The Ridge Tool Company Wythe, Ohio, U. S. A.

By NEIL REGEIMBAL
Washington Editor



BPN Washington Report

From BUTANE-PROPANE News Washington Bureau

REA will feel bite of 1959 economy axe

The Eisenhower Administration will make another attempt this year to cut its subsidy spending for rural electric power programs.

Budget Director Maurice H. Stans says that aid to REA power co-ops will be one of the key government spending programs to feel the bite of the 1959 economy axe.

He listed REA loans as one of the "non-essential" spending programs which under today's conditions should be cut "until we can again afford them."

"The reasonable approach is that rural electric cooperatives should now be able to get some of their financing from other than government sources, especially for non-farm purposes," he says.

He indicates that President Eisenhower will again try to get Congress to adopt legislation to encourage a switch from government to private financing, and cut back the amount of money available for loans by the Rural Electrification Administration to power co-ops.

He is also expected to renew his demand that the interest rate charged on the loans that are made to REA co-ops be raised from the present legal 2 per cent limit to a figure which will cover the costs to the government of getting the money and processing the loans (about 3.5 per cent).

Mr. Stans, pointing out that today some 95 per cent of farms already receive central station electric service, says:

"The startling fact is that three out of four new users currently being added are now non-farm users. About one-half of REA electric power goes to industries, communities, or non-farm families."

Co-op tax advantage hit again

The annual battle to remove the tax advantage of cooperative buying and selling organizations is beginning with advocates of tax reform taking a new slant and dealing from a position of relative strength.

In an effort to prevent stirring up the usual wrath of the farm bloc, backers of reform legislation are planning to limit their efforts to securing normal business taxation of so-called consumer cooperatives—those selling to farmers and others in competition with normal tax-paying firms.

Fresh boom in homebuilding industry expected

Forecasts for the homebuilding industry in the new year are becoming increasingly optimistic.

Chances appear strong for a fresh boom in construction of new houses and for repair, modernization and expansion of older homes. This means that markets for appliances from kitchen ranges to furnaces and for new customers for L. P. gas should strengthen during the year.

Conservative government housing experts predict an 11 per cent rise this year in total spending for new homes—up from \$18.5 billion in 1958 to \$20.6 billion in 1959—and a better than 5 per cent boost in last year's 1.1 million new homes.

FTC's price trickery drive getting good support

The government is getting good response from the consuming public to its efforts to crack down on price trickery.

Federal Trade Commission sources say almost 20,000 letters and wires protesting fake bargains have been received since the agency opened its new drive against deceptive prices three months ago.

"Many consumers have become aware that they have been hoodwinked on bargain prices," the FTC says. The result has been a flood of letters and telegrams from consumers.

FTC cracking down on false advertising claims

The government is stepping up its policing of retail advertising on TV and radio.

Orders have gone out to the entire professional staff (more than 350) of the Federal Trade Commission to watch their TV screens at home for evidence of false or misleading advertising. The FTC employees won't be paid any more for the after-hour work. And there's nothing compulsory about it. They are simply told to jot down names of firms and products which they see or hear in advertising copy that violates federal laws against misrepresentation. They'll turn in their notes to professional FTC investigators, who will seek to determine further what laws—if any—are being violated.

NOW! FROM HARDWICK

FABULOUS, NEW

MicroRay

RANGE



**cooks TWICE as fast
with HALF the gas!**

New! Hardwick brings you the most exciting, versatile gas range ever! The beautiful new Hardwick MicroRay range with EquaFlo Baking Oven plus a new giant second oven with the revolutionary MicroRay burner — that allows you to broil, roast or barbecue with unbelievably fast, efficient, 3-micron heat waves. Thermostatically controlled live flame rotisserie. Other foods can be cooked simultaneously in the conventional EquaFlo Oven. MicroRay! A new era in gas cooking!

**ADVERTISED IN McCALL'S
LADIES' HOME JOURNAL
BETTER HOMES & GARDENS**

WHAT IS MicroRay?

- ***NEWEST**—MicroRay contains ceramic ports—the first to be introduced in a domestic range. Offered only by Hardwick.
- ***FASTEST**—MicroRay cooks twice as fast with half the gas. So much more economical to operate.
- ***FINEST**—Sears foods quickly, sealing in natural juices and producing tenderer, juicier, more delicious foods.
- ***CLEANEST**—Cuts spatter and drip as much as 50%!
- ***COOLEST**—High luster aluminum, lining the MicroRay Meat Oven, reflects 80% of the heat rays back to food, keeping exterior of range cool.



MicroRay

only Hardwick has it!

NAME _____
ADDRESS _____
CITY _____ STATE _____

BP-59-2

SEND FOR COLOR FOLDERS AND FULL DETAILS

HARDWICK STOVE COMPANY · CLEVELAND, TENN.



FROM ANY VIEWPOINT

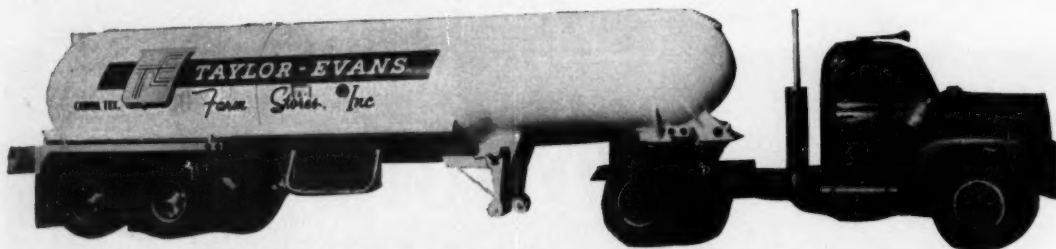
LMC Transports offer you more

Year after year, more and more LPG dealers have given LMC products the strongest possible recommendation . . . that of re-ordering additional units after carefully checking the performance of their first LMC tank.

From small units, for home delivery on the Plains, to 10,000 gallon transport tanks to haul loads in steep mountains LMC has pioneered many changes which are now standard features on all transport tanks.

Many dealers who started with one single barrel LMC home delivery unit are now operating fleets of transport tanks, all engineered for economy by Lubbock Machine.

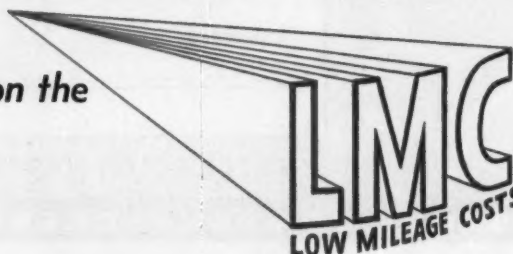
Write, wire, or phone today! Find out how easy it is to purchase on the Budget Plan or the LMC Lease-Purchase Plan.



LUBBOCK MACHINE & SUPPLY CO.



Buy on the



Box 1589 PO 2-5261
LUBBOCK, TEXAS

**Budget or Lease-
Purchase Plan**

beyond the mains



THE ANSWER IS NO!

What steps do you take to hire--and keep--good salesmen?

In the BPN-sponsored round-table meetings held during the past two years, and in individual conversations between the editors and industry leaders, this question recurred many times.

One possible solution advanced was to sell electric as well as gas appliances. Not only would a dealer sell radios, television, and other non-competitive items, but he would handle directly competitive items as well. Here are the alleged advantages:

1. It would bring into the store the buyer who had already had her mind made up on electric, and would give the salesman the opportunity to change her mind for her.
2. It would give the salesman the chance to make a competitive presentation, in which he could stress--graphically--the advantages of gas over electricity.
3. As a last resort, the dealer could sell the die-hard proponent of electric cooking, water heating and refrigeration the electric appliance, taking the sale away from a competitor.
4. But most important--here was the real crux--the salesman would have a greater variety of things to sell, his income would be increased, and he would be a more loyal and harder working employee.

The idea may have merit, but we couldn't find anyone who would actively support it. The vote of the panelists was a resounding "NO."

Some had tried it, others had considered it, but nobody really liked it. Some reasons:

"All we did was confuse the customer"--this comment from a company that had once had a contract for one line of electric appliances--"and send her elsewhere to check on other electric brands."

"Dollar inventory was too high."

"Not enough profit in electric appliances."

"Salesmen take the course of least resistance and sell whatever is easiest to sell, whether gas or electric."

"Electric service failures are blamed on the LPG dealer (even poor TV programs!)."

"The profit on electric appliances is too short. We can pay a bigger commission on gas appliances and still make a profit."

"The salesman can learn his sales points better if he has only a few appliances to demonstrate."

There you have it. The answer is "no." But it still leaves the basic question unanswered: "How are you going to hire-- and keep--good salesmen?"

We do mean you.

Let us hear from you. In coming months, we'd like to explore this problem further.

William Clark



**world's finest
two-stage
regulator outfits
now COMPLETE
in a
SINGLE PACKAGE!**

ONE NUMBER COVERS EVERYTHING

Now, merely by specifying one Outfit Number, you get the complete RegO Two-Stage Regulator Outfit you need—pigtail for connecting to service valve; first-stage Red Giant regulator for delivery pressures of 1-5 psi, 5-10 psi, or 10-15 psi; and the famous RegO second-stage regulator delivering uniform flow at 11" W.C. . . all for loads up to 625,000 btu (250 cfh) or 1,250,000 btu (500 cfh).

Options include: pressure gauge on first-stage regulator, mounting bracket for second-stage regulator, and a suppressor assembly that eliminates pressure pulsations caused by the impedance of vent piping when second-stage regulator is installed inside a building. Just one number specifies everything—saves your time in selection and ordering . . . assures over-all balanced components.

WRITE FOR THIS HELPFUL NEW FOLDER

New RegO Folder L-417 explains when and how to install two-stage regulation . . . the resulting economies, including minimizing of freeze-ups . . . the importance of suppressors for pressure uniformity and safety protection . . . simplified RegO "package" numbering.

Also included are charts showing recommended line sizes between first- and second-stage regulators as well as between second-stage regulators and appliances, a typical installation diagram, and a table of minimum distances governing location of stationary tanks with respect to buildings. Nowhere else will you find all this information so convenient for instant reference. Write today!



PIGTAIL FOR TANK CONNECTION



FIRST-STAGE
RED GIANT REGULATOR
Pressure Gauge is Optional



SECOND-STAGE
REGULATOR



MOUNTING BRACKET
FOR REGULATOR



SUPPRESSOR ASSEMBLY



DO YOU KNOW
it will pay you
dividends to join!



The **BASTIAN-BLESSING** Company

4201 West Peterson Avenue, Chicago 46, Illinois

FEBRUARY 1959



INDIANA APPLIANCE DISTRIBUTOR

Bryant-Hedback earns its keep

MARTIN A. BROWER • Managing Editor

"We don't want to buy through appliance distributors. We want to buy directly from the factory at the distributor's cost. Why should the distributor make a profit on every appliance we sell? He does nothing for us."

These were the comments of L. P. gas dealers across the nation who attended the BUTANE-PROPANE News Appliance Manufacturer-LPG Dealer forums during the past two years.

"An LPG dealer has a right to gripe about buying through a distributor if the distributor is doing nothing for him," answers Philip R. Hedback, Bryant-Hedback Co., Indianapolis, Ind., appliance distributor. But Mr. Hedback is on firm ground. He can show that if his LPG

dealer customers bought direct from the manufacturer and had to pay for the services he renders to them—if those services were available for a fee—it would cost the LPG dealers more than Mr. Hedback's gross profit on a sale.

BPN has long heard of the many services rendered by Bryant-Hedback to LPG dealers in the central and southern Indiana area. Several months ago, we visited Mr. Hedback in his Indianapolis office, questioned him at length, spoke to his office staff, his salesmen, and to several LPG dealers who came into the office. We wanted to find out exactly what an appliance distributor can do for an L. P. gas dealer. Here is what we found.

Dealers from central and southern Indiana gather at Bryant-Hedback headquarters in Indianapolis for a dealer meeting.



BPN FIELD REPORT



INDIANAPOLIS, IND.

It was almost 5 p.m. when the serviceman of a southern Indiana LPG dealership called into his headquarters by radio. He told the service manager that the customer's furnace he was working on had a burned out blower control. The furnace was not one for which the dealership normally carried parts. Too few calls for that type. Nothing in stock. The customer might be without the furnace for days.

The dealer put in a hurried call to Bryant-Hedback Co. in Indianapolis. Did the distributor have such a control in stock? It did. How long would it take to ship it to the dealer's town? It was too late to send it out by the normal trucking channels. But it would be there by morning. A Bryant-Hedback man took the part by company truck to the interstate bus terminal in Indianapolis. The bus driver dropped the part into the serviceman's waiting hands early the next morning. The customer's furnace was operating well before noon.

"Prompt delivery is a normal part of our warehousing function," explained Phil Hedback, owner of the concern which distributes appliances and controls throughout 66 Indiana counties. "We feature overnight delivery."

Warehousing is only one of 11 special services offered Bryant-

Hedback customers. Services extend from helping dealers close heating sales to conducting a school program. Listed briefly, these services include:

1. Sales and service help
2. Warehousing
3. Credit
4. Installation and service schools
5. Advertising and promotion service
6. Engineering service
7. Dealer meetings
8. Sales aids
9. Association activities
10. Show displays
11. Telephone information service

Phil Hedback has a big stake in the L. P. gas industry. He reports that 35 per cent of his sales of heating products are to L. P. gas dealers. But it wasn't always that way.

Sold dealers on heating

When Phil Hedback began distributing gas appliances in 1945, he worked entirely with utility gas companies and dealers. At that time, to Mr. Hedback's knowledge, there was no LPG dealer in the state of Indiana in the heating field.

In 1948 the growth of utility gas stopped as gas supplies became frozen in central Indiana. So Bryant-Hedback went to the L. P. gas dealers. Mr. Hedback and his newly-acquired salesmen stumped the state. They went to every L. P.

gas dealer in an effort to sell them on going into heating.

Today, the greatest percentage of bulk LPG dealers in Indiana sell and install central heating. "The most progressive LPG dealer is one who is in the heating business," Mr. Hedback commented. "The LPG dealer who has set himself up as the heating dealer will be able to stand all future competition from electricity."

Bryant-Hedback's concentration on LPG dealers has paid off handsomely. He has been awarded the Bryant Manufacturing Co. plaque for highest sales of any distributor of his size class every year since 1955. And Mr. Hedback realizes fully exactly where much of the credit for his success lies. "I don't make a dime until the LPG dealer makes money," he stated. "That's why we do everything we can to help the dealer sell."

Bryant-Hedback's 11-point dealer service program is a big one on the surface. And as one goes deeper, the program gets even bigger. Let's take it apart and really look at it, point-by-point.

Sales and service help

Bryant-Hedback concentrates five salesmen in its central and southern Indiana sales area. Each man lives in the center of his territory so that he can be of maximum help to all dealers under his wing. The men are much more than salesmen. They are there not only to sell but to help the dealer



A special room at Indianapolis headquarters is set aside for service and installation schools.

in every way possible, especially with sales and service.

Mr. Hedback emphasizes that every man on his sales staff is a university man and all but one are graduate engineers. All salesmen drive company cars and have company credit cards for fuel so that they don't mind going out of their way to help a customer. All are paid equally and receive a bonus based on gross sales so that they are entirely customer-oriented.

One of the biggest jobs the salesmen do is in making heating surveys for LPG dealers. Bryant-Hedback men calculate heat loss, help select the right product to do the required job, size the job, and give the dealer a sketch of the required installation. In the early days, the distributor used to supply dealers with complete engineering drawings, but most dealers are now advanced enough to make the installation from a sketch and many do not even require that, except on unusual jobs.

"Most LPG dealers can do everything by themselves," Mr. Hedback reported, "but many of them lack confidence. We give them the confidence they need."

Whenever needed, a salesman goes out with a dealer to help close a heating sale. At one time, the salesman would get a list of heating prospects from the LPG dealer and go out in the field himself, turning the sales over to the dealer.

Trouble shooting is where the



Phil Hedback looks over one of his salesman's notebooks.

salesmen really come in handy. Every Bryant-Hedback salesman carries a complete tool kit and a stock of common spare parts in his car. All an LPG dealer who is having an installation or service problem has to do is leave a call for a salesman at his home and the man is in the dealer's office the next morning. (All salesmen work close enough to home to return every night.)

"The smart LPG dealer sends a

serviceman out with our salesman on a trouble shooting call so that he can learn what to do next time," salesman William Hedback commented. "But we go out to the installation alone if a serviceman can't be spared," he added.

Another place where the salesman comes in handy is in the case of high bill complaints. A salesman accompanies dealers on calls to complaining customers so that the situation can be corrected or explained to the customer's satisfaction.

Warehousing

LPG dealers cannot afford to have capital tied up in a complete line of heating equipment in every type and size. Bryant-Hedback can, because that's its job. The distributor also features the fact that it can supply everything needed for a complete heating installation job—furnace, controls and venting.

And, as previously explained, overnight delivery is emphasized. The dealer can therefore use Bryant-Hedback's capital and warehouse as his own.

Although the distributor supplies both LPG and natural gas dealers, the company stocks LPG



Dealers close in for a better look at how it's done during a recent school session.

models of every furnace carried.

Featured in Bryant-Hedback's warehouse stock are Bryant central heating furnaces, Quaker space heaters, Stewart-Warner window heaters, Metalbestos venting, Minneapolis-Honeywell, Baso, General and White-Rodgers controls, Brilliant Fire wall heaters, Payne panel heaters, Universal wall heaters, Bryant water heaters, Bowser incinerators and Turner LPG torches. Also carried is a full line of new and replacement parts.

Credit

Bryant-Hedback extends convenient credit to LPG dealers so that the dealer's cash is free for other uses.

Installation and service schools

In an industry that has so immense a need for training of personnel, schools—especially free schools—are always welcome. Bryant-Hedback operates its own installation and service school program.

A special room has been set up for schools at the distributor's Indianapolis headquarters. The room is complete with torn down models of gas appliances, visual aid equipment and LPG cylinders. LPG is used so that LPG dealers can work with actual LPG appliances.

School subjects are based on needs which arise. The last series consisted of three three-day schools on air conditioning. This was based on the fact that air conditioning is becoming increasingly important to heating dealers. Between 25 and 30 men were present at each of these. The next series of schools will be on controls.

Instruction is by Bryant-Hedback men and/or by factory experts.

It isn't even necessary for LPG dealers to come to Indianapolis to get schooling. The schools are frequently taken out on the road. The distributor will put on a school for any LPG dealer who is willing to bring his men together to attend—right at the dealer's plant.

Advertising and promotion

The services of Bryant-Hedback's advertising man are avail-

able to all of the company's customers. LPG dealers are invited to come into Indianapolis and sit down with the advertising specialist on any advertising or promotion problem.

In the case of a direct mail campaign, for example, the advertising man will provide ideas for the campaign or will write the mailing pieces and plan the entire program. Or, dealers can get help from him through the mail.

Engineering service

The distributorship has an air conditioning engineer on its staff, stationed at headquarters, to help with all air conditioning problems. He is prepared to provide LPG dealers with complete air conditioning layouts for any job, just as the company once did with heating jobs when that was new to dealers.

Dealer meetings

Once each year, Bryant-Hedback holds a day-long dealer meeting for all of its customers. The meetings are somewhat like association conventions—they feature an educational program, provide an opportunity for dealers and distributor to exchange ideas, and are always considered an outstanding social success.

Former meeting programs have

included such speakers as a banker on financing the business and a building and loan man describing home construction activity and customer financing.

A theme is picked for each dealer meeting and the entire program is built around it. Last year the theme was an outdoor barbecue and wives were invited. The affair was held at Phil Hedback's home and 278 dealers and wives turned out.

Sales aids

Seldom does a week go by that Bryant-Hedback customers do not get some type of sales aid through the mail. These are all aimed at helping the dealers do a better selling job. Included are special promotion and service ideas and sales points on specific appliances.

Of special interest, however, are the letters sent out by Phil Hedback. One of these pointed out that 23 per cent of all retail sales of space heaters are made during the month of August. It explained that early buyers are usually better credit risks and that they buy higher-priced merchandise. Another letter pointed out the increasing importance of wet heat. A third letter emphasized that the time was right for circularizing heating customers for summer service.

Bryant-Hedback's owner stands near a portion of his huge warehouse stock.





An overall view at the 1958 dealer meeting shows the chow lineup.
A barbecue theme was used for the affair held at Phil Hedback's Indianapolis home.



Phil Hedback, at mike, gets ready to check this lucky lady's ticket at last year's dealer meeting. Over \$2000 worth of gifts, including a color TV set, were given away.

Association activities

Although Phil Hedback runs his own service schools and his own annual dealer meeting, he is not trying to compete with the Indiana LPGA. In fact, the Bryant-Hedback Co. and Phil Hedback are deeply wrapped up in LPGA activities. Mr. Hedback has been secretary-treasurer of the Indiana LPGA for the past three years. Letters promoting LPGA meetings and functions are sent directly from the Bryant-Hedback office.

Show displays

A believer in promotion, Bryant-Hedback helps LPG dealers set up exhibits at fairs and shows. The company provides a display background and appliances and equipment on a loan basis. All the dealer must do is set up the display.

Telephone information service

The company has a sizable headquarters staff as near as the dealer's telephone. The entire staff is ready to help the dealer whether

he calls in or drops into the office in person as several LPG dealers did during BPN's visit there.

In most cases, however, dealers need only to call the salesman in their own areas for help and advice—and they do. "I get calls at home during the day, on weekends and at night," laughed salesman Paul Landgren.

Wet heat currently looks promising in the Indiana area, so Bryant-Hedback is keeping its customers alerted in this direction. One large LPG dealer recently brought several of his top men to Indianapolis to learn more about wet heat from the Bryant-Hedback men. "Wet heat scares LPG dealers at first," stated salesman William Hedback, "but they were once scared of water heating and warm air heat, too. Our customers—and even non-customers—needn't be afraid of tackling a wet heat job, though. We'll give them all the help they need in selling it, installing it and servicing it."

And that is how Bryant-Hedback earns its keep as a distributor. Phil Hedback summed it up like this: "Our customers realize that we are a pretty good bargain at the price, and without us they would have a pretty rough time."

How to Protect Your Capital AND MAKE IT GROW

By J. GORDON ALLARD

Safeguarding your capital accumulation



OUR future security and how to attain it is the major problem concerning all of us.

Just because you happen to be the owner of a successful business enterprise today does not necessarily mean that you have attained permanent and lasting security for yourself and family. Down through the ages we have repeatedly witnessed the downfall of individuals and families who had apparently achieved complete financial security but due to a sudden change of circumstances or due to lack of competent planning for the future, found themselves destitute.

Granted, many careless individuals have foolishly dissipated their capital resources. But there are many businessmen who through lack of understanding of our complex economic system, through failure to obtain expert and competent advice, or by failure to adequately prepare for their future problems, awaken one day to find that they possess little or no security for their remaining years.

What are principal problems?

In our last article we discussed in a very general way the boundary lines within which a sound and profitable LPG business should operate and examined figures of actual companies demonstrating both satisfactory and unsatisfactory results. Assuming you are the owner of a well-established, sound and profitable business, what security considerations are of concern to you now? What are the principal problems confronting you?

Due to the very nature of our economic system, owners of successful businesses are faced sooner or later with the very basic problem of protecting and safeguarding that which they have built over the years. In other words, the problem of securing their *capital accumulation*. In the case of the LPG dealer, his capital accumulation consists principally of property, bulk plants, tanks, trucks and various types of other equipment, all of which in combination with a certain amount of cash create a going business.

On a company's statement, this capital accumulation appears under the heading "Earned Surplus" or "Retained Earnings" which is actually a better term. The word "surplus" is apparently an unfortunate name as it sounds like free cash set aside in the sock ready for instant use. The employee may see it as an excellent reason for higher wages. In reality, the account usually means earnings plowed back into the business and long since transformed into tanks, trucks, accounts receivable, or inventory items. The "surplus" is all over the lot on the assets side, and normally you could not take it out in cash without wrecking the business. Every time "surplus" appears on a statement it is a good idea to bear in mind the thought: "earnings reinvested in the business."

Capital accumulation is reward

These earnings reinvested in the business are an owner's *profit*—his *capital accumulation*, and his reward for many years of hard work. The L.P. gas industry has been most fortunate, for it has enjoyed many advantages as evidenced by the tremendous public acceptance of the product which has resulted in the almost unprecedented growth of the industry in less than three decades. Due to this factor and other circumstances, many individuals engaged in this industry have been able to build, from a very meager beginning, comparatively large businesses and they now have at their disposal a very substantial accumulation of revenue-producing assets.

The paramount problem facing the successful businessman today, including the LPG dealer, is how to

keep his profit and capital intact in terms of purchasing power and protect it against rapidly changing economic conditions.

It is obvious that situations never remain status quo but are constantly subjected to change, and in business, if a company does not continue to progress and expand, then it must of necessity fade away until it eventually disappears from the scene. Business at best is hazardous, and sustaining the life of any business, large or small, is a tough job.

Five main considerations

There are generally five principal considerations with which most owners of any successful business are concerned:

1. Security for himself, family and heirs, and adequate provision for the payment of inheritance taxes.
2. Security for his employees and their families through continued employment.
3. Security for his customers through the guarantee of uninterrupted and efficient service.
4. Security of his investment through the guarantee of proven, capable and continuing management which can carry on when he is no longer able to do so.
5. Security of his investment by protecting it against prolonged inflation and the cheapening of money.

To briefly illustrate the effect of inflation, most owners of common stocks and real estate have profited tremendously during the past 20 years. The great increase in the value of such holdings, and in the

incomes from them, have reflected in substantial part the shift of real wealth from retired individuals dependent upon pensions, from holders of life insurance, savings bonds, annuities, cash savings and social security credits. Our losses in the *purchasing power* of these six equities through government-sponsored inflation amount to nearly \$200 billion. This amount is over 97 times our loss in deposits in banks during the years 1921 through 1933.

To further illustrate, the man who purchased a \$750 "E" Savings Bond in 1942 received \$1000 for it on maturity in 1952, but through inflation the \$1000 would purchase only \$614 worth of goods and services. The purchasing power of *all money* has declined in the same ratio, and continued inflation at the present time appears inevitable.

Senator William E. Jenner, in his valedictory before the 85th Congress last August, described the situation with the following words: "Nothing in the New Deal, nothing in World War II, and nothing in the postwar years of Korea, is anything like as outrageous as the spending spree of 1958. We have thrown away the hope of a balanced budget for years to come."

Specific problems

What are the problems, specifically, which confront the owner of a successful business thus creating the big over-all problem of attaining the above mentioned securities which he desires? How do these problems affect the security of his capital accumulation and jeopardize its being kept intact? The following discussion deals with five of the most important specific problems and, in a very general

PART TWO

A discussion of how owners of LPG businesses should safeguard their capital accumulation.

Five principal considerations with which owners of successful businesses are concerned.

A discussion of five specific problems confronting the owners of successful businesses showing:

How those problems affect the security of his capital accumulation and jeopardize its being kept intact, and

How those problems can be minimized or alleviated.

way, how these problems might be alleviated.

Problem No. 1—Sudden death of the owner. While this isn't a particularly pleasant subject for discussion it is nevertheless one of the most compelling reasons why an owner should be concerned about the future of his business and his personal estate. The great majority of estates of American businessmen who possess a sole proprietorship, or who own an interest in a close corporation or a partnership, consists of that interest or business as the major value in the estate. This condition has been created by the practice of most business executive owners plowing back into the business most of the earnings of the business above immediate family requirements. Consequently there is a need for the owner to decide whether the best interests of the family group require the liquidation of the business interest, or the preservation of the interest through the development of competent executive management.

Unfortunately, many owners fail to cope with this problem in advance and in the event of sudden death the company finds itself destitute of management talent which is able to continue operating the company successfully. Incompetent

management can wreck a successful business in a very short space of time.

Inheritance tax

There is always a problem in this kind of situation in establishing a value for the business for inheritance tax purposes, and it is up to the inheritance tax appraiser to determine the value. Although the appraisers always try to place a fair evaluation upon a business or property, often times the appraisal is far in excess of what any willing buyer would pay and the heirs may be stuck with the taxes on that evaluation—period.

Until the passage of the new 1958 Tax Law last September, the taxes had to be paid, *in cash*, within 15 months of the death of the individual which often meant the liquidation of the business for cash to pay the estate tax. However, now under section 206, Title II—Small Business Tax Revision Act Of 1958—there is a provision permitting payment to be spread over a 10-year period with interest at 4 per cent on the unpaid balance.

To qualify for this privilege, the value of decedent's interest must exceed either (1) 35 per cent in value of his gross estate, or (2) 50 per cent of his taxable estate. Any

of the following is considered an interest in a closely held business: (a) A sole proprietorship; (b) a partnership interest, either where there are 10 or less partners, or where decedent's interest amounts to 20 per cent or more of the firm's capital; (c) stock in a close corporation, under tests that parallel those for partnerships.

Two or more businesses may be treated as one in applying the 35-50 per cent rule, if more than 50 per cent in value of each business is included in the estate.

However, the installment privilege ends and the commissioner will demand payment of the full balance, if there is a withdrawal from the business of 50 per cent of its value. The same result follows from a distribution or sale of 50 per cent or more of the interest qualifying for the installment privilege, so that it no longer is part of the estate or is no longer owned by an heir who inherited the interest directly.

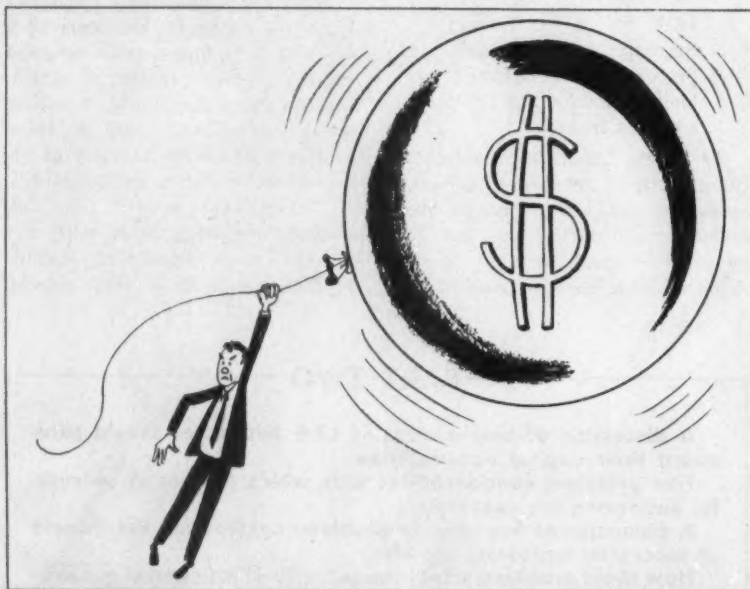
Capable management

Consequently, unless there is qualified, experienced and capable management to continue operating the company successfully, the installment payment of inheritance taxes is of little or no value as the widow or heirs would have to sell the business anyway.

Furthermore, the heirs may have additional tax headaches if the appraisal happened to be considerably lower than what a willing buyer would pay. If the business is sold for a higher amount, then there is a capital gains tax to pay on the amount in excess of the appraised value. And don't forget that there are both *state and federal* estate taxes to pay, and between the two of them, the value of the estate doesn't have to be too awfully high before you are stuck with paying over 50 per cent in taxes. By not being properly prepared, the fortunes and businesses of many families have been wrecked and put into insolvency.

Take his profit

There are several courses of action which an owner may take in order to minimize the dangers just described, and the needs and problems of each individual will vary



Inflation is one of the most serious problems facing businessmen today. It is difficult to conserve capital in light of the mounting costs of equipment, maintenance, wages, taxes, and services and the stepped-up tempo of obsolescence.

considerably. However, there is one course of action which almost any owner might consider in cases where competent management is lacking to carry on the business. He may take his profit and transfer his capital accumulation into a more negotiable form which has a definite and established value. The L.P. gas dealer can exchange all of his tanks, trucks, property and equipment for "cashable" securities, i.e., shares of stock in a sound, profitable publicly owned company whose shares are traded daily in the open market place.

Now his business is represented by shares of stock and their value is exactly what somebody paid for a share of that stock on the last sale. The owner's assets now have a definite, determined value and the inheritance taxes are paid on that basis.

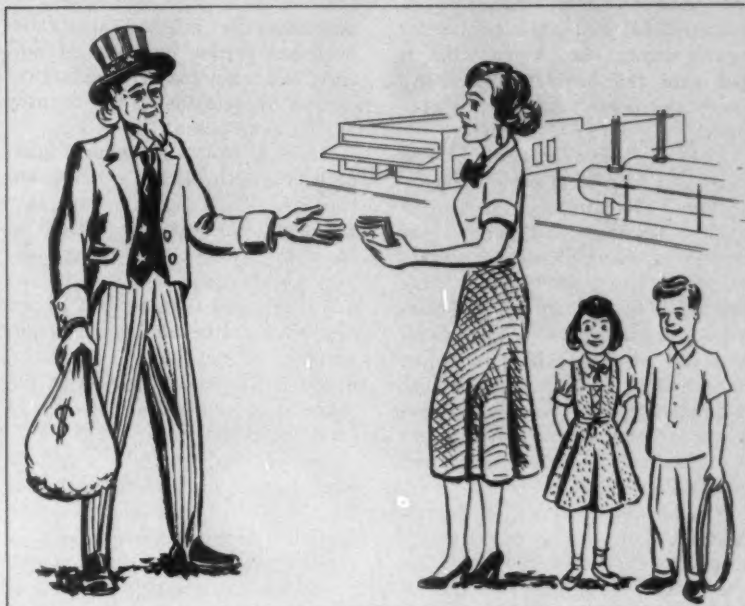
Usually in this situation the heirs would be able to take advantage of the installment privilege for as a rule there would be no immediate urgency to sell the shares. If there is a need for additional immediate cash for one reason or another, the heirs can obtain it in a matter of minutes either by borrowing against the shares or by selling some of them to waiting buyers.

There is no management problem for what was his individual business managed by himself is now a very small part of a much larger enterprise with the management talent to carry on.

Obviously, an owner can accomplish this same security by exchanging all of his capital accumulation for cash. Then he may selectively and carefully re-invest his cash by purchasing shares of stock, bonds, income property, and so forth, and diversify his estate in many different directions.

Executive talent best bet

For an owner to liquidate his business interest has the effect of reducing the income on the value of the interest from the rate enjoyed as business profit to a rate obtainable on investment capital. The rate on investment capital capable of preserving principal in an inflation afflicted economy has suffered a drastic decline in recent years while the problem of maintaining the purchasing power of its income



Sudden death of the owner of an LPG dealership can result in serious consequences for his beneficiaries when it comes time to pay inheritance taxes.

has increased in complexity.

The greatest advantage to the family group is the creation of executive talent to carry on the business which will enable dependent members of the group to retain business income instead of being cut to investment income on all of the asset value of the business. However, lacking management talent, it is much safer for an owner to liquidate his business interest during his lifetime.

Problem No. 2—Obtaining sufficient capital for continued growth and expansion. When the individual owner needs money he must resort to borrowing either from commercial banks or individuals as the regular channels of investment funds are not open to him. This type of *short term* borrowing is fine for meeting temporary or seasonal requirements, but it is not too satisfactory when you require money for *long term* growth and expansion.

Today's high tax rate is the most serious inhibitor of business growth. If a business does not have sufficient profit, *after taxes*, to finance its expansion, then it is difficult to negotiate a satisfactory loan in the first place and even more difficult to pay it back with interest.

If the business is large enough to justify a very substantial loan on a long term basis, then if the profits and other factors are satisfactory, the loan can probably be negotiated with an insurance firm or investment trust at a reasonable interest rate with 10 or 15 years to repay.

It is fine to build a big business enterprise on borrowed money if you are in a position to do so, particularly during a period of prolonged inflation, but an individual cannot go on in that manner forever. He is constantly out on a limb and any sudden reversal in his business or in the economy as a whole, such as *deflation*, could be ruinous. With inflation the borrower is paying off his debt with cheaper and cheaper dollars, but if deflation should come about, then he is forced to liquidate his debt with dollars which are worth much more than the dollars he borrowed. Many large, well managed and highly prosperous companies in other countries have been completely wiped out under such circumstances.

Large, *successful* corporations do not have such an acute problem when they need money for growth and continued operation. They are in a position, through investment

bankers, to go to the public for equity capital, i.e., money that is put into the business and stays there and doesn't have to be paid back.

They can also more easily borrow cash on a long term basis from insurance companies, investment trusts, pension funds and other very large reservoirs of idle capital. They can also borrow money from the public by issuing bonds, debentures, etc. The amount of capital available in this country is almost unlimited to those businesses that can qualify with respect to adequate and sound profits, competent management and attractive growth potential.

Problem No. 3—Lack of diversification. The owner of a fairly sizable business has all his eggs in one basket. If things should suddenly take a turn for the worse in his industry, or some major disaster take place in his immediate area, he might find himself in a very bad way overnight. Economic growth is achieved, if and where it is achieved, as some elements of the economy expand more rapidly than those that are static or are contracting and perhaps are in the process of dissolution.

A striking example of a rapidly expanding segment of the economy was provided by the automobile industry through the 1920's. During the same period the carriage industry and to a lesser extent the motorcycle and bicycle industries were shrinking.

Also, the owner of a business is locked in—there is no ready market for what he owns, unless he wants to sell the whole thing and then he will discover that possible buyers are very few, particularly if his business is a fairly large one.

The smart investor will diversify himself both industrially and geographically. Except under total economic collapse, all industries are

not adversely affected simultaneously and neither do adverse conditions exist, nor major disasters occur, in all sections of the country at the same time.

Problem No. 4—Increased competition. With all the other problems he has, the individual operator will find it increasingly difficult to meet the competition from companies many times bigger and much better financed than he just as the corner drug store and small neighborhood market found it difficult, if not impossible, to cope with the competition of the chain stores and super markets.

One of the means by which to combat inflation and rising prices is through tremendous mass production and mass buying. The L.P. gas company with 100 million gal. of distribution annually should certainly be able to bring all products and services to the public on a more efficient basis than a company with a 1 million gal. distribution.

There are as yet no real "giants" in this relatively young LPG industry comparable to those in the steel, chemical, oil, automobile and like industries. But the LPG giants are coming along fast with highly competent management and enormous potential financial backing, so the smaller dealers should be making their future plans accordingly. The individual owner should take some action before he suddenly finds his company with a death trend running out of money, running out of business, and running out of management.

Problem No. 5—inflation. Inflation simply means paying higher prices for the things we have to buy than our incomes can stand. As burdensome as taxes have become, inflation has become even more so. The dollar today is worth a third less than the dollar just after World War II, and less than half what the 1939 dollar was

worth. This situation simply accentuates the problem of getting enough dollars with which to buy the equipment we need to keep growing and expanding.

Add the mounting cost of maintenance, taxes, and services along with the stepped-up tempo of obsolescence, and you have the highly complicated problem of conserving your capital. The only way to even begin to keep up with inflation is through enormous volume, and the smaller independent operator simply cannot cope with the situation the way a huge operation can.

Inflationary spiral

Just in case you are not as yet fully aware of the extent to which you have already been taken by inflation as a result of your government's fiscal policies, bear in mind that since World War II was started in 1939, the Federal Government's spending has increased until it is now more than eight times greater. The federal tax collector has reached the point of taking us for nearly 28 times more income tax and more than 10 times more social security taxes.

The cost of living has been more than doubled while the value of the dollar has been reduced to well below 50 cents. In order to match a 1939 income of \$5000 you must now have an income of \$13,000; a 1939 income of \$10,000 now requires nearly \$31,000 just to stay even, while a 1939 income of \$50,000 requires \$333,000. If things go during the next 18 years like they have during the past 18, the dollar will be worth less than 25 cents and it will take an income of over \$33,000 to match a 1939 income of \$5000; over \$92,000 to match a 1939 income of \$10,000; and over \$835,000 to match a 1939 income of \$50,000.

Although the inflationary spiral may be stopped from time to time, nevertheless there is not much doubt but what inflation is still one of our most serious, if not *the most serious*, problem we have, and its threat of endurance into the foreseeable future and of its progressive development, emphasizes the increased importance of conservation safeguards as a major objective in protecting our capital accumulation ■

Coming next month in part three of this series . . .

Three courses of action a successful LPG businessman may take to provide him with the maximum of future security.

A detailed discussion of one of those courses of action—that of selling a business.

Three general ways in which an LPG business may be sold.

A discussion of each method showing the advantages and disadvantages and the tax consequences.



This portable Freeto asphalt plant was converted from fuel oil to LPG. At left is the cold feed. Behind it and extending to the

right is the rotary dryer. The equipment at right center is the pug mill. Part of the asphalt storage tank can be seen at far right.

Highway asphalt plants

offer huge LPG market

KEN KIRKPATRICK

THOUSANDS of miles of asphaltic concrete highway will be laid during the next few years before the national highway construction program now underway is completed. The contractors who build these asphalt highways must buy tremendous quantities of fuel to heat the asphalt and crushed rock they will use. Aggressive LPG dealers can tap this big new market by selling highway contractors now on the advantages of using LPG in their asphalt plant operations.

L. P. gas competes in this large market with both fuel oil and nat-

Here's what happened when Freeto Asphalt Co. converted an asphalt plant from oil to LPG:

- 1. Production increased 25 per cent.**
- 2. Quality of product went way up.**
- 3. Starting-up time—thus waiting time—decreased sharply.**
- 4. Labor cost went way down.**

Result: A superior product at less cost per ton

ural gas. But LPG has important advantages over both. Asphalt plant operators who have converted from oil to LPG find production increased, a better quality product, less start-up so less waiting time, and reduced labor costs. LPG's advantage over natural gas is its portability—the fuel supply goes wherever the plant goes.

Highway contractors operating oil-fired asphalt plants are particularly good prospects for conversion to LPG. You can use sales ammunition from the detailed case history given later in selling LPG conversion to highway contractors in your own area. Although the small plant (60 tons per hour) described here uses about 1200 gal. of LPG per day, larger plants may use several thousand gallons daily. Volume figures like these mean added dollars in the pockets of dealers who exploit this growing market.

Asphalt plant operation

Knowing how an asphalt plant operates is an advantage in selling a contractor on converting to LPG. Such a plant simply dries and heats aggregate (crushed rock, sand, or gravel), then mixes it with heated asphalt. The mixture is then loaded into trucks and transported to the construction site.

The asphalt plant itself consists of three major parts, the cold feed, the rotary dryer, and the pug mill. Also needed are an asphalt storage tank and a heater for the oil or steam used to keep the asphalt at 300 deg.

The cold feed has several storage bins for different types of aggregate. A conveyor belt carries measured amounts of each type of aggregate into the dryer, where the material is dried and heated to the temperature required by the construction job's specifications. This is often about 350 deg.

From the dryer, the hot aggregate is fed into the pug mill, where a screening device may again adjust the amounts of each size of the material entering the final mix. The pug mill mixes hot asphalt from the storage tank(s) with the aggregate. The finished product, "hot mix," is then loaded into waiting trucks.



These twin LPG-fired burners, shown in operation, furnish heat for one of several heating units used with the hot oil circulating system. Hot oil keeps asphalt in the storage tank at 300 deg.

Asphalt plants burn fuel at two points, the rotary dryer and the heater for the oil or steam which circulates through the storage tank(s) to keep the asphalt at 300 deg. In addition to these obvious places for LPG, alert dealers may also sell contractors conversions on their power units and trucks. Asphalt trucks use LPG to power the engine and to heat the truck's contents.

Freto asphalt plant conversion

The Hot-Mix Equipment & Fuel Co., Stillwater, Okla., manufactures a butane vaporizer system designed for asphalt "hot-mix" plants. Last summer this firm, assisted by Clifford Crowe, plant superintendent, converted a 60-ton-per-hour Barber Greene Model 845 asphalt plant, belonging to Freto Asphalt Co. Inc., Pittsburg, Kans., from fuel oil to LPG. At that time the plant was in operation at Chaunte in the eastern part of Kansas.

The conversion required replacing the oil burners with two Webster Model IV, 25 million-Btu burners, and installing the Hot-Mix butane vaporizer system. This system consists of a vaporizer, butane drying header, pressure

regulator, relief valves, and necessary connecting lines. Asphalt plant LPG conversions usually include both the rotary dryer and the oil heater. In this case, separate LPG units were already in use on the oil heaters, and only the rotary dryer was fired by the vaporizer system.

Removing the oil burners eliminated the need for a blower which supplied air to the burners. This change made the 10 hp used by the blower available for plant operation.

Vaporizer operation

L. P. gas from the storage tank first enters the vaporizer, where its pressure can be regulated from 15 to 30 lb. It then passes through the doughnut-shaped drying header (see photo), which encircles the burners at the entrance to the rotary dryer combustion chamber. The dry LPG then feeds into the burner. In most installations, LPG also goes through another line to fire the oil or steam heater.

The volume of L. P. gas entering the burners is adjusted by valves on the burners themselves. LPG pressure is controlled by the pressure regulator. Relief valves

on the vaporizer system are set at 125 to 250 lb on the line from the LPG storage tank to the vaporizer, and at 50 lb on the lines from the vaporizer to the LPG drying header.

The Hot-Mix vaporizer is designed to operate safely at temperatures as high as 1100 deg. and at pressures up to 250 psi. The units are actually tested at 500 psi, and all parts are fabricated according to the ASME Boiler Code, Par. P-112.

The Freeto plant uses a 6000 gal. LPG tank, which it owns, and a 5200 gal. semi-trailer, placed on the location by the Stocker Propane Service, Mt. Vernon, Mo., which furnishes L. P. gas to the plant.

Conversion results

Freeto officials say that the installation has been highly successful. Ralph Gore, Freeto's vice president, said "This system has increased the production of our plant approximately 25 per cent, and at the same time, we have substantially reduced our unit heat cost per ton of material processed through the plant. The system has been trouble-free in operation, va-

porization and combustion have been complete, and we are able to process more material through the plant while maintaining an even temperature of 300 deg. and have less sweating of material, and we feel that we have a superior end product. This was true even on the coldest day the plant was operated.

"We are well pleased with this system and are thinking of purchasing another plant, which we will certainly equip to burn LPG in both heater and dryer."

Freeto gained several advantages by converting from oil to LPG. First, the plant's capacity was increased. It now delivers its full rated capacity, which represents an increase of from 5 to 10 tons per hour.

A second advantage of LPG is that the quality of the finished mix has been improved, thus reducing rejections by highway inspectors. Using LPG has eliminated the contamination by imperfectly burned fuel oil which had resulted when Freeto attempted to operate its plant at high production rates.

A third advantage of LPG is that its use reduces time required

to get the plant into initial production each morning and to resume operations when temporary interruptions cause shutdowns.

"Vehicle waiting time has been reduced at least 15 minutes," said Plant Superintendent Crowe. "This is especially important in the morning. Now I can start the plant only 30 minutes before time to begin loading the trucks. When we were using fuel oil, I had to start from 45 minutes to an hour ahead of time.

"This is a big help too when we have temporary shutdowns. This happens often at intersections when we're paving city streets. We frequently fill all the trucks and have to shut down until they can be emptied."

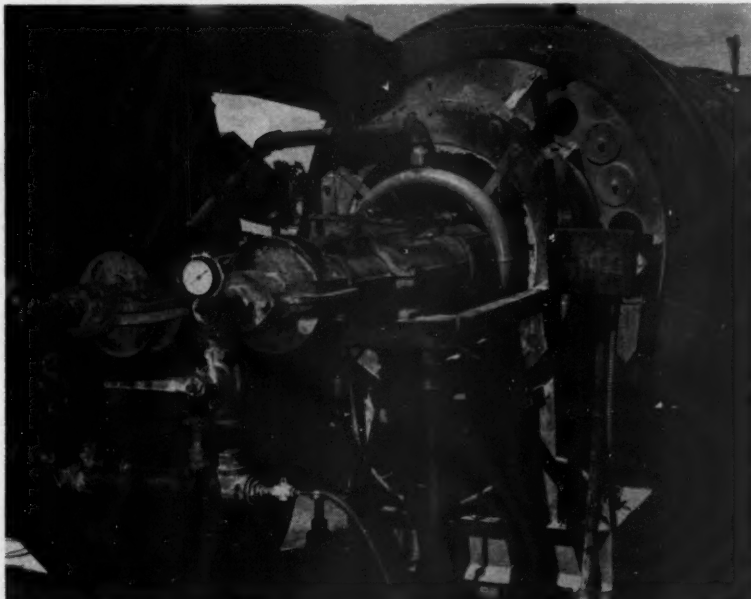
A fourth advantage is that small heaters for the oil circulating system can operate on butane unattended, thus reducing labor required. "When we were using fuel oil in the oil heaters," said Mr. Crowe, "we had to keep a man on the heater to watch the oil burner and shut off the oil if the burner went out. Sometimes a small piece of lint would stop up the fuel line, making the fire go out. When that happened, raw diesel fuel could pour out onto the hot metal and cause an explosion. I have seen men burned seriously in such an accident. Fortunately we just don't have that problem with butane."

Truck fleet converted

About 40 Chevrolet trucks belonging to Freeto Asphalt Co. and the Freeto Construction Co. were converted to L. P. gas earlier, in February 1957. Twenty-five of these units have dual carburetion systems allowing either LPG or gasoline to be used.

Most of the conversions were made by Dale George in Freeto's own shop. Both Beam and Century carburetion systems were used. The trucks were equipped with 50 gal. tanks.

Freeto's storage capacity at its Pittsburg, Kans., location consists of one 3000 gal. tank and four 1000 gal. tanks. A service wagon, made by mounting a 1200 gal. tank on a Chevrolet truck chassis, accompanies the fleet in the field. In addition, Freeto has 1000 gal. and 500 gal. fuel tanks mounted on



The LPG burners and vaporizer are shown mounted in front of the rotary dryer's combustion chamber. The burners extend from the left of the picture toward the combustion chamber at right center. The doughnut-shaped tubing between the burners and the combustion chamber is the LPG drying header.



Plant Superintendent Clifford Crowe adjusts the LPG flow into the burners as he starts up the asphalt plant's rotary dryer.

two-wheel trailers to service the trucks. These trailer units are equipped with John Blue vapor pumps, which pump LPG at about 19 gpm.

Fleet conversion results

Freeto officials say that the \$20,000 cost of the conversion was paid out in about 16 months. Mileage using a 60/40 propane-butane fuel mixture has been about 80

per cent of the mileage Freeto got from gasoline. But fuel costs have been cut approximately in half due to the lower cost of LPG.

Oil consumption has been reduced. While oil changes were made every 2000 miles when gasoline was used, oil is now changed at 10,000-mile intervals. This means an 80 per cent reduction in oil costs. In addition, the oil is now cleaner when changed at 10,-

000 miles that it was previously at 2000 miles.

Maintenance costs have also been reduced. Previously, trucks required overhauls at approximately 40,000 miles. On LPG, these units have already gone about 55,000 miles, and no major overhauls are indicated in the foreseeable future. Heads were pulled from two engines, for examination. Inspection revealed that the engines were clean, with no carbon present. Ralph Gore, Freeto's vice president and general manager, said that he expects far less engine wear now than before. He based this statement on the condition of examined engine parts and the fact that no sludge was present in the oil.

In addition to these money-saving advantages, Gore felt that performance was also improved. He specifically mentioned the increased smoothness of truck operation and the fact that trucks now pulled hills without shifting gears. Improved performance has been an important consideration in Freeto's evaluation of L. P. gas.

This is the story of LPG's role in helping one of the asphaltic concrete paving contractors who is helping to build America's expanding highway system. The background information and specific performance data given should help you get your share of profits from this new high-volume market. ■



This asphalt truck uses L. P. gas in three ways: as truck fuel, as fuel for the separate power plant mounted at rear, and as fuel

for the heaters which keep road-sealing asphalt hot. Freeto Asphalt converted 40 trucks.

IF you would find a lesson in the successful operation of Gas Arc Supply in Philadelphia, it would be this:

There's a real opportunity for the industrial LPG specialist.

Bill Griffith, Gas Arc's imaginative president, has hitched his wagon to the plumbing supply trade, and it has given him a profitable ride. Tomorrow he may diversify, but if he does, it will be accomplished without changing the basic personality of his operation. He's a small dealer, and an independent, and he has no delusions about competing with the big companies for the basic loads.

Griffith has made his mark by being a specialist in a well-defined field. He competes by having built a reputation as an expert and by rendering a complete service in gases and equipment.

Griffith sells both propane and acetylene, because he thinks one complements the other. The same plumbing supply houses which he serves handle both. By carrying not only the gases but a complete selection of equipment to utilize them, he has wrapped up this market.

Today he has but one sideline, and this too can be considered complementary. He sells, rents, and services salamanders. These keep construction work going in the wintertime, thereby keeping his plumber customers busy in spite of bad weather.

Started with acetylene

Griffith started Gas Arc Supply (G.A.S.) back in 1946, operating out of a downtown location in Philadelphia and handling acetylene gas and welding equipment. As an adjunct, he began selling plumbing supplies of a sort that are used in welding, cutting and similar related applications.

In the late 1940's, Griffith's acetylene customers were still using gasoline in their lead melting pots. It was unsafe, inconvenient, and undependable. Leaded gasoline would tend to clog the orifices, and non-leaded gasoline was not always available. The pots had to be pumped up to make them fire. And there was always danger from the gasoline can which was a necessary part of the equipment.



Bill Griffith (left), president of Gas Arc Supply, stands with his son Don on the cylinder loading platform of their Philadelphia firm which specializes in selling LPG to plumbing supply houses.

LPG for plumbers—only

WILLIAM CLARK—Editor



To Griffith, this usage seemed a natural for LPG. He made arrangements to handle a supply of gas and gas equipment, and began trying to sell it to the plumbers. Unacquainted with the fuel, they balked. It took a real educational job to get them to change their minds. Griffith, a powerful fighter for his height and weight, had to carry the fight through the state's Bureau of Licenses & Inspections.

He had to demonstrate the inherent safety of the product. And he had to prove it was worth the extra cost.

Once he had torn away the curtains of apathy and opposition, he was in the LPG business. It wasn't long before he realized that this fuel had a lot more possibilities within this general market. For certain applications, LPG is better than acetylene.

There was probably a bit of the defensive in his attitude, too. If he didn't go into the LPG business, someone else might. He had nothing to lose thereby but his customers.

Combination distributorship

So he began to reshape his business into a combination distributorship of acetylene and LPG. He arranged for a bigger and better means of obtaining gas. He set up a line of LPG fittings similar to those used in conjunction with the acetylene supply. But he never did intend to abandon the latter business.

"LPG and acetylene go together in this trade," declares Griffith. "LPG will do a better job than acetylene in certain applications, but acetylene is superior in others. A dealer who is going to handle one should handle the other. It's an advantage for a dealer to be able to advise his customers on the choice of fuels. He can be thoroughly objective about it."

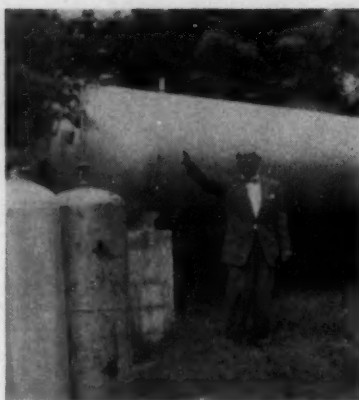
Since it's cheaper, Griffith recommends LPG for those users where it is equal in performance with acetylene.

LPG, he says, is superior for relatively large work areas, such as in metal bending. Where metal of heavy gauge is being worked, however, and where the job must be done in a constricted space, Griffith feels that acetylene has the edge.

Welding experts

By carrying both fuels, Griffith and his son Don, who works with him, have been able to establish themselves as experts in the field of welding. Plumbing supply houses that sell their gas and accessories to plumbers are usually not in a position to achieve such status. As a result, one or the other is frequently called on the telephone by a dealer who has a plumber in his store and needs some technical advice. This they are happy to give; they specialize in giving good service.

The Griffiths started out with the usual shoestring operation, buying their gas from a bottle filling depot across the river near Camden, N. J. They soon found they were going back and forth every day, and the



Gas Arc Supply's Bill Griffith stands in front of his 1800 gal. bulk LPG tank and points toward town to show where his new bulk tank will be located.

time and labor involved together with the mounting bridgetolls, persuaded them to set up their own bulk storage.

This they did in 1954, installing an 1800 gal. tank on the Burdett Acetylene plant some miles north of Philadelphia. With it they had their own cylinder filling station.

Once the Griffiths were in gear with their propane business, it started building up rather rapidly. They concentrated on 20-lb. cylinders, supplemented by a smattering of 100-lb. models. About seven-eighths of their sales have been of the smaller size. In 1954, they were averaging only about 12 cylinders a day, but by four years later they had increased this to 34 cylinders. The 100-pounders are used around plants where a good deal of cutting and other work is regularly done with propane. These are served directly by Gas Arc Supply, whereas practically all of the smaller cylinders are sold through dealers.

Specializing pays

Griffith will tell you that there are a lot of reasons why it has paid him to develop a particular personality for his business, and to channel it into certain well-defined directions. He will also point out several reasons why it pays to be small.

By limiting himself in this way, he has built up a good market saturation and has established himself as a leader in a particular field even though his business is not a large one. He has developed his

own line of "Gas Arc" acetylene and propane equipment and accessories. He has regular contracts with manufacturers to supply this equipment to his specifications. It may be a standard type of equipment in most cases, but nonetheless it bears the Gas Arc seal. This builds identity among users and gives them the assurance that Gas Arc is standing behind the equipment it is selling.

Included are cylinders stamped with the Gas Arc name; high pressure, low pressure, and appliance regulators; safety check tank connections; torches with and without pilot or trigger control; wooden handle torches; torch tips; goose-neck assemblies for paint burning and for large capacity heating, and others for light, delicate work, for plumbing use, for sheet metal, etc.; overtop furnaces for lead melting; assemblies for plumbers and painters; components such as adapter hose, hose fittings, hose tools, hose kit, wrenches, spark lighters and flints, needle shut-off valves, gauges, and leak detectors. He carries a similar line of supplies in the acetylene side of the business.

Cylinder delivery

Gas Arc Supply has four drivers and a counter man. Among them, they keep the customers well supplied. Two trucks handle the routes. Generally, these two carry the 20-lb. cylinders, the 100-lb. cylinders being delivered by the oxygen trucks. Routes are so planned that the customers with the highest usage can be reached three times a week. Some are on a once-a-week basis. Griffith has found that about six cylinders per drop is the minimum number that is profitable.

Cylinders are sold on an exchange basis. In order to service the business properly, Griffith carries about 400 oxygen cylinders on lease, and another 400 which are owned outright. The company also owns 500 small cylinders of both types—that is, a mixture of the small acetylene cylinder and the 20 lb propane cylinders.

Griffith also has a very profitable side line in the form of a winter salamander load. Salamanders are either rented or sold, although the

bulk of them are rented. There is a charge of \$5 per month or any part of the month. This includes the entire assembly with regulator and hose. The stock of units totals approximately 120 salamanders, with Btu inputs ranging from 50,000 to 85,000 Btu per hour. A salamander running 24 hours a day will use approximately a cylinder a day. Most of them, of course, do not run this long.

Salamanders have done some spectacular jobs on winter-time construction. An outstanding example was the Ambassador Towne House project in Philadelphia, which took place during the winter of 1957 and 1958. Throughout the winter, Gas Arc Supply furnished the job with an average of 60 salamanders per day. At the peak of construction, there were 89 in use. This gave Gas Arc Supply an average of \$300 per month for the salamanders themselves, not including the gas which they were using.

But to the builders of Ambassador Towne House, it meant a great deal more. By working straight through the winter—something they wouldn't have been able to do without a source of heat—they succeeded in moving up the occupancy date by two months. Rents, according to Griffith, average \$5000 per month per floor. There are 18 floors.

There's an adjunct to this particular type of business. Gas Arc Supply sells one appliance, a Perfection space heater. This is particularly useful in construction offices.

Business has mobility

Mobility is the characteristic of a small business that Griffith feels is a big advantage when you're carrying on the type of operation that he is. He has 11 employees, including four truck drivers, one counter man, three men in the office, and one salesman. The other two are the Griffiths, senior and junior. Since he is doing a cylinder business, it's necessary for Griffith to have a sizeable office force. Yet he can add new types of cylinder business without expanding his help. He has drivers who can add a new line such as forklift trucks, and handle the business in stride. The business is small enough so that most of the men are acquainted with the jobs that the other men are doing, and they can step from one to another without too much difficulty. Furthermore, when it comes time to put in a new plant or a new facility it can be done by Gas Arc personnel at a very low cost. For example, they set up their own facilities when they put in the plant at Burdett Acetylene. Aside from tank and

appurtenant equipment, their only material cost ran well under \$100. They did the labor themselves and have excellent results to show for it.

In the winter, they can throw almost their entire force into the salamander business if need be.

More bulk storage

And now he faces a new challenge. It was inevitable that eventually Gas Arc Supply would outgrow its 1800-gal. storage on the Burdett property. Even if the business were confined to 20-lb. cylinders, Griffith would still have to call for fairly frequent deliveries. Adding to this the load demands of 100-lb. cylinders, plus a booming salamander rental business in the winter-time, he has had a real supply problem. Some weeks in the winter-time there have been as many as four fills.

So Griffith began approaching the breaking point. Where should he go from here? Should he stop expanding, ease off on the salamander business, or should he put in extra storage? If he put in extra storage at such a remote location, he would have to get more equipment to haul the cylinders back and forth and his costs would continue to rise.

There was no other answer but to find a location closer into town. This he managed to do despite an uphill battle before the zoning board. (At this writing, the new plant is under construction.)

So now Gas Arc Supply is once more on its way—and which way will this be? Well, Griffith has had his eye on the forklift truck business for a long time. But with his limited supply, he's been unable to take it on. Furthermore, he would have to compete with his own supplier for this business. Now, however, with his larger storage he'll be buying direct from the refinery at a winter rate that will cut this cost sharply. In the summer he will do even better.

So now he can compete. He can sell his gas by the cylinder for around 26 cents for forklift uses. Perhaps he can work toward developing some bulk customers in this market. If so, he can drop his price to around 17 cents and really break into the clear. ■

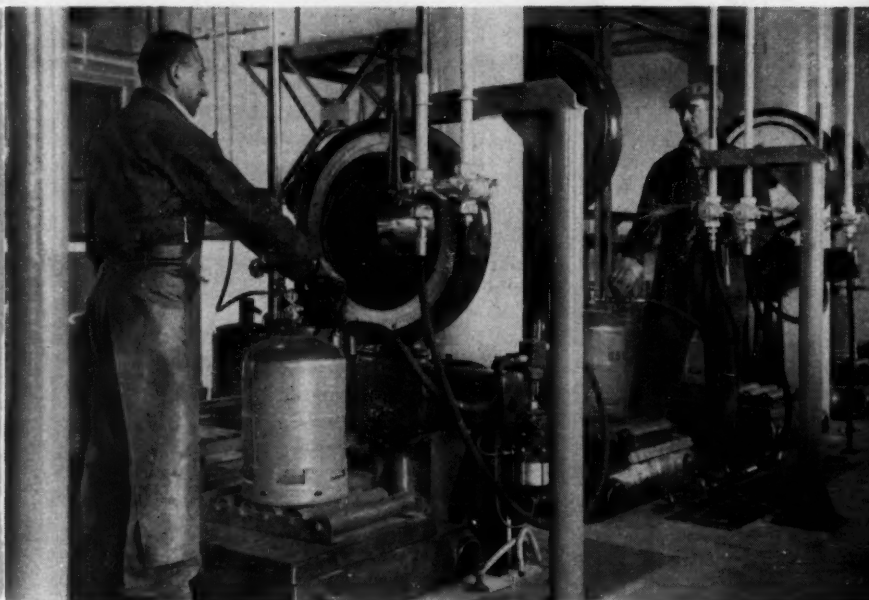


Don Griffith checks Gas Arc Supply's cylinder filling equipment.



LPG is a jolly good fuel, old chap

Although still in its infancy, the L. P. gas industry is undergoing rapid growth in the British Isles. Four major marketing firms are presently meeting the needs of the populace with cylinders such as those on the right, being filled at British Petroleum Co.'s Grangemouth refinery near Edinburgh, Scotland.



W. S. AMOS

IN some areas of the British Isles sales of liquefied petroleum gases have increased by more than 800 per cent since 1950. Even so, the industry might be regarded as being in its infancy. Industrial development is just beginning, and carburetion applications are almost non-existent. Only a handful of vehicles run on L. P. gas in Britain and Ireland.

Overall consumption of L. P. gases in Britain more than doubled in the six years from 1950 to 1956. In 1950, sales stood at around 30,000 tons (14.7 million gal.). In 1956 (the last figure available) the total was 70,000 tons (34.3 million

gal.). Domestic users of LPG account for 85 per cent of all sales.

The prospects of the L. P. gas industry in Britain can be gauged by making an examination of basis refinery capacity. In 1948, total production of petroleum products from Britain refinery plants stood at a mere 2½ million tons. Annual output in 1956 was no less than 30 million tons, and some of the larger petroleum companies have further expansion programs in hand.

In spite of these figures, consumption of L. P. gas in Britain is by no means high. Other European countries use much greater amounts. But it should be remembered that the bulk of Britain's more than 50 million inhabitants

are housed in heavily built up areas where cheap coal gas and electricity supplies are available.

In Scotland more than two-thirds of the entire population (five million) live in the industrialized Clyde-Forth Valleys. But farmers and fishermen in the remoter parts of Scotland use more L. P. gas per head of population than the rest of the United Kingdom.

Britain's main producers of liquefied petroleum gases are the Esso, British Petroleum, and Shell companies. L. P. gas cylinder filling stations are maintained at the Fawley, Llandarcy, Grangemouth, Stanlow, and Shell Haven refineries. In addition, both butane and propane gases are produced from



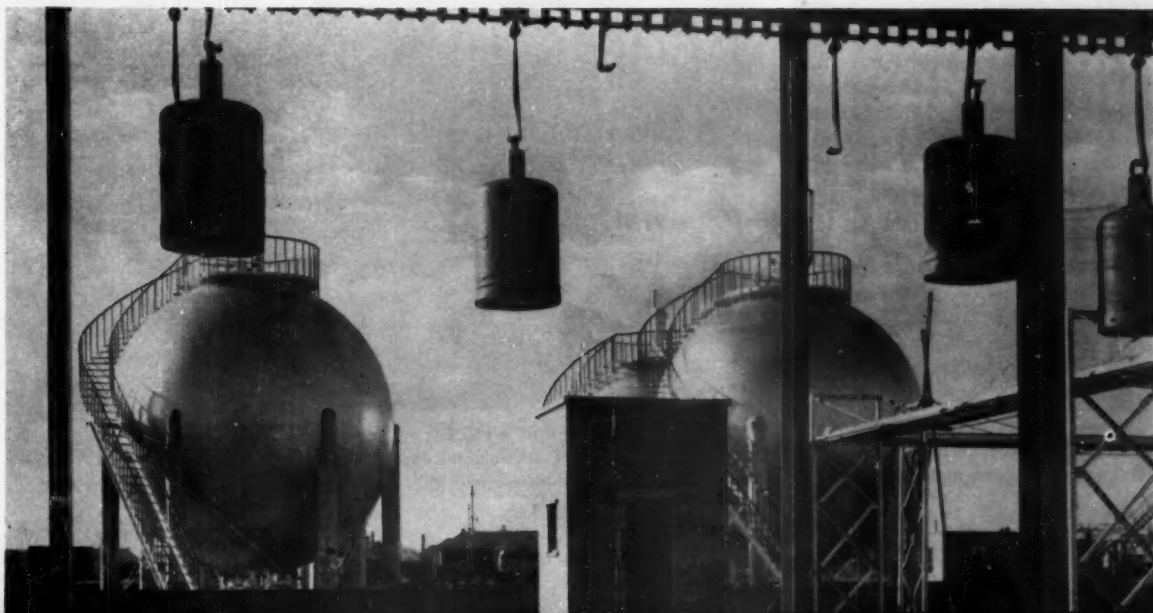
Calor Gas uses this special trailer to demonstrate LPG appliances to customers in the rural areas of the British Isles.

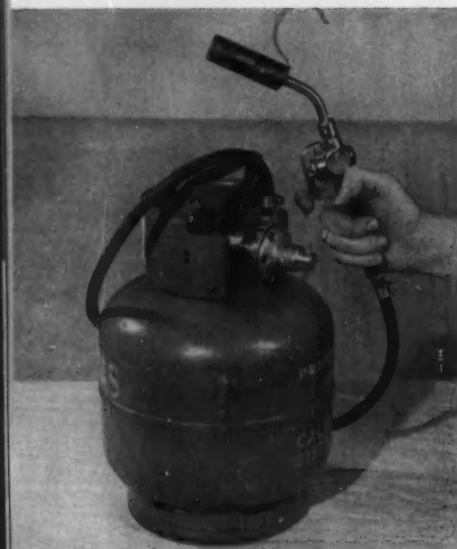


With doors open and ramps down, the display trailer is ready for business. A cooking school is usually held.

Right, a Calor Gas (Scotland) Ltd. exhibit of LPG appliances at the Highland Show in S. t-land. This is typical of L. P. gas dealer trade fair and agricultural show exhibits.

Below, LPG cylinders move on an overhead conveyor at the British Petroleum Co.'s Grangemouth refinery cylinder filling plant in Scotland. In the background are three of four 25 ft Hortonspheres which store LPG.





Top, a bedroom heater mounted on a 10 lb cylinder.

Bottom, a multi-purpose hand torch.

a creosote hydrogenation process operated by the gigantic Imperial Chemical Industries group.

Four main distributors handle domestic marketing arrangements. They are Calor Gas, Scottish Rural Gas, Bottogas, and Country Gas. A Danish concern, Kosangas, is also operating in the Irish Free State. Propane for industrial use is handled by three companies: the British Oxygen Co., Saturn Industrial Gases, and Midgley Industrial Products Ltd.

In general, the domestic gas distributors have different ideas in terms of marketing arrangements. Calor Gas is Britain's largest distributor. It operates a local agency

plan, with more than 1500 concessionaires. Specific areas are covered by appointing various hardware stores and garages as accredited dealers. These agents normally also handle kerosene and other fuel oils.

Calor Gas makes regular stock deliveries to its agents. The firm also helps with sales promotion programs and cooperates with advertising material for insertion in county newspapers. The agents have their own delivery arrangements, of course, but Calor keeps interest alive by arranging cookery demonstrations with the help of local women's clubs. It also operates large mobile trailers which are designed to show off L. P. gas appliances in villages far from main shopping centres.

Scottish Rural Gas serves some 50 per cent of the L. P. gas users in Scotland. This company prefers personal approach methods. It delivers containers direct to customers from the refineries. Scottish Rural Gas truck drivers are specially trained to give installation advice. They also carry out maintenance operations on a no-charge basis. Scottish Rural Gas claims that this is the only service of its kind in Western Europe.

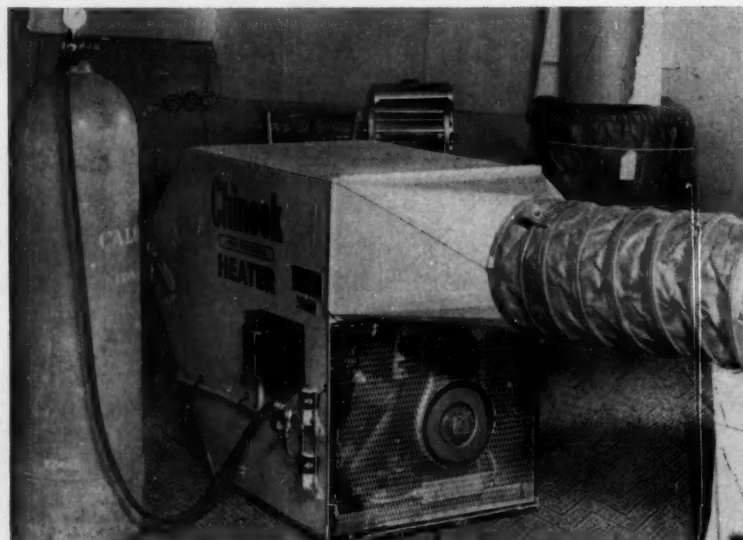
All the distributors use the popular 32-lb container. Other cylinders are available in 10-lb, 14-lb,

83-lb, and 125-lb sizes. Three of the distributing companies make a rental charge of \$7 on each container, regardless of size, but Scottish Rural Gas has never made any such charge.

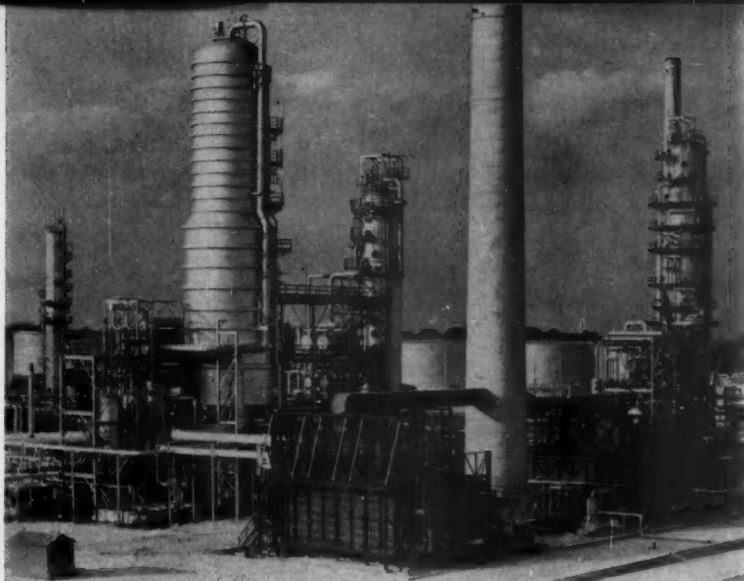
Transportation Costs

It is interesting to note that all British L. P. gas distributors are absorbing transportation costs. This is unusual in Britain. Transportation costs are high. At the present time truck gasoline costs about 58 cents per imperial gal. (1.2 U. S. gal.). Even the price of fuel depends upon added transportation costs. In some areas it is 5 to 8 cents dearer than the price quoted above. Domestic L. P. gas users are fortunate. Those living 500 miles from a filling plant obtain supplies at the same price as those who live in the immediate vicinity.

To recover part of the cost involved in supplying liquefied petroleum gas to consumers living on various islands around the coast of Scotland, the Calor Gas company made an interesting deal some years ago with the North of Scotland Hydro Electric Board. This plan calls for a cost sharing agreement between the two companies on a gas distribution arrangement operating on remote islands where electric power instal-



This mobile ducted LPG-fired heater has its fan driven by LPG. One of the few carburetion applications to be found in Britain, the 18 in. fan is driven by an 18 cu in. motor. It is used by building contractors where electricity is not available.



The Esso refinery at Fawley. The slim column at the extreme left is the debutanizer.



A view inside the cylinder filling plant at the Grangemouth refinery shows operators filling 25 lb cylinders.

lations are not practicable. The canny islanders were at first inclined to think that there was some catch in this arrangement, since it is normally impossible to buy *anything*—except perhaps a postage stamp—at the price pertaining on the mainland. But sales of L. P. gas and appliances are booming there today.

Industrial and agricultural use

Apart from industrial organizations that use propane for metal cutting and non-ferrous welding operations, farmers and stock breeders are amongst the best customers of British L. P. gas distributors. Many chicken brooder, piglet warmer, and dairy sterilization plants have been installed in

the past few years. The single unit piglet warmer burns 1.38 cu ft of gas per hour, and an 83 lb cylinder lasts about 15 days.

Despite the relatively high cost of the portable 10 lb cylinder it is becoming increasingly popular with plumbers, electricians, and interior decorators who use multi-purpose blow torches for soldering, brazing, and paint burning. Tradesmen who are now using L. P. gas blow torches are convinced that, in addition to being messy and possibly dangerous, the gasoline type blowlamp is a waste of time.

Domestic use

Much of the L. P. gas consumed in Britain is used for cooking. Domestic users normally rotate a pair of 32 lb cylinders. Frequent deliveries, and little or no saving in terms of cost, make larger containers less important. Very few houses have pipes running to external bulk storage tanks.

Most of the distributors exhibit appliances at trade fairs and agricultural shows. But, unfortunately, many domestic appliances are burdened with heavy taxation. British "purchase tax" to the extent of 60 per cent on wholesale value is levied on water heaters, refrigerators, lighting equipment, and portable radiation and convection type heaters. Cooking equipment is not taxed, and installment purchase facilities are normally available. A modern L. P. gas range can be installed for a first payment as low as \$14. Cooking ranges are priced up to about \$200, with refrigerators running from \$165 to \$300.

With crude oil refinery capacity increasing year by year, it is certain that the British L. P. gas industry will continue to expand. Advertising campaigns and sales promotion schemes seem to be adequately financed. The distributors are not slow to grasp opportunities. It seems possible that some of the smaller coal gas manufacturing plants will disappear. A limited amount of liquefied petroleum gas is already used by the nationalized coal gas industry in the form of gas/air mixtures to meet peak load demands.

L. P. gas appears to have a big future in Britain. ■

"Average operating cost per mile for our 10 Ford bob-tails is only 4.5 cents"



*says L. T. Ortego
Office Manager
Superior Butane Co., Inc.
Opelousas, Louisiana*



"Operating economy, dependability and high resale value keep us 100% Ford!"

"Our F-600 Ford trucks, carrying 1500-gallon butane tanks, have proven very economical. The 4.5-cents-per-mile figure includes all fuel, oil, parts and labor costs. That's especially good when you consider that the truck engine puts in plenty of pumping time, both on loading and on deliveries—hours of running that don't show up on the speedometer.

"We run other Fords ranging from F-100 pickups to F-800 tractors. Maintenance costs are lower than on other trucks we've used, and

the ready availability of Ford parts minimizes downtime. Ford's high resale value is another reason we use them . . . makes it profitable for us to trade every 24 to 30 months.

"Our 15 Ford trucks are on call 24 hours a day, and the worse the weather the more our trucks run. In the winter they'll go up to 72 hours steady without stopping the engine . . . we just change drivers. In the past we've used about every make truck and have found Fords best for our work."



Go FORD-WARD for savings with '59 Ford Trucks!

Whatever your job . . . wherever you do it—you'll find Ford trucks are engineered and built to do it better! And the '59 improvements in the Mediums and Heavies, for example, will bring still more benefits to your operation.

Greater operating economy with new, faster rear axle ratios and wider choice of transmissions.

More efficient parking brake of the internal expanding type has approximately 50% greater stopping and holding ability,

requires less than half the operating effort needed for the previously used type.

Increased payloads and longer axle life with new, higher-capacity front and rear axle options.

Factory installed tractor package custom-fitted to Ford trucks for safer, more dependable braking.

Yes, the new '59 Ford trucks are here to take you *Ford-ward* for savings, *Ford-ward* for modern style and stamina. See your Ford Dealer today!

FORD TRUCKS COST LESS

LESS TO OWN...LESS TO RUN...LAST LONGER, TOO!

What the serviceman should know about . . .

L. P. gas clothes dryer controls

Part 1: Electric ignition controls

**E. W. WECHSLER • Manager, Technical Sales Division
White-Rodgers Co.**

IN any discussions of gas-fired clothes dryers, the control systems must be broken down into two categories. There are those dryers having a completely automatic electric ignition system, and those which instead of electric ignition, incorporate a standing pilot. From the standpoint of understanding the control system, they are somewhat similar in nature, but do vary considerably in servicing. Our discussion, therefore, will be divided first into electric ignition gas dryer controls, and secondly, standing pilot systems.

In both systems, there may be a number of variations. Here, however, we will cover a basic system, with some mention of the variations which might be involved. If one understands this basic system, it is quite likely that he can diagnose a field problem, regardless of the dryer.

A gas-fired electric ignition dryer control system consists primarily of the following:

The automatic pilot

An automatic gas pilot, with some provision for electric ignition, lights the main burner. This pilot operates only when the dryer is in operation, which is the period during which a load of clothes is drying. It might also be defined as the period set by the housewife on the dryer timer. As in any other gas-fired system, the pilot is the safety means for making certain that gas cannot be passed through the main burner without ignition.

The dual gas valve

A dual gas valve, of the solenoid type, is the second major component of the electric ignition system. This actually consists of two solenoid valves in the same gas line. The first of these valves, the one closest to the "A" cock, controls the flow of gas to the automatic pilot. It actually provides what is known in L. P. gas terminology as 100 per cent shut-off. In other words, if for some reason the pilot does not ignite from the electric ignition coil, this valve, after a suitable period, will shut off the gas to the pilot, making certain that there is no gas being admitted to the dryer, either to the main burner, or to the pilot.

The second solenoid in the line

immediately follows this pilot solenoid, and is usually referred to as the main burner valve. It cycles under the control of the timer, the cycling thermostat, and the high temperature limit switch. Its purpose is to control the temperature in the drum of the dryer. In this connection, it senses when the clothes are dry, and shuts off the main burner, preventing overheating or possible damage of the clothes.

The cycling thermostat

In the previous paragraph, we mentioned a cycling thermostat. This may be an adjustable thermostat covering a range of drying temperatures, or anywhere from one to three fixed-setting thermostats, depending on the design of the dryer.

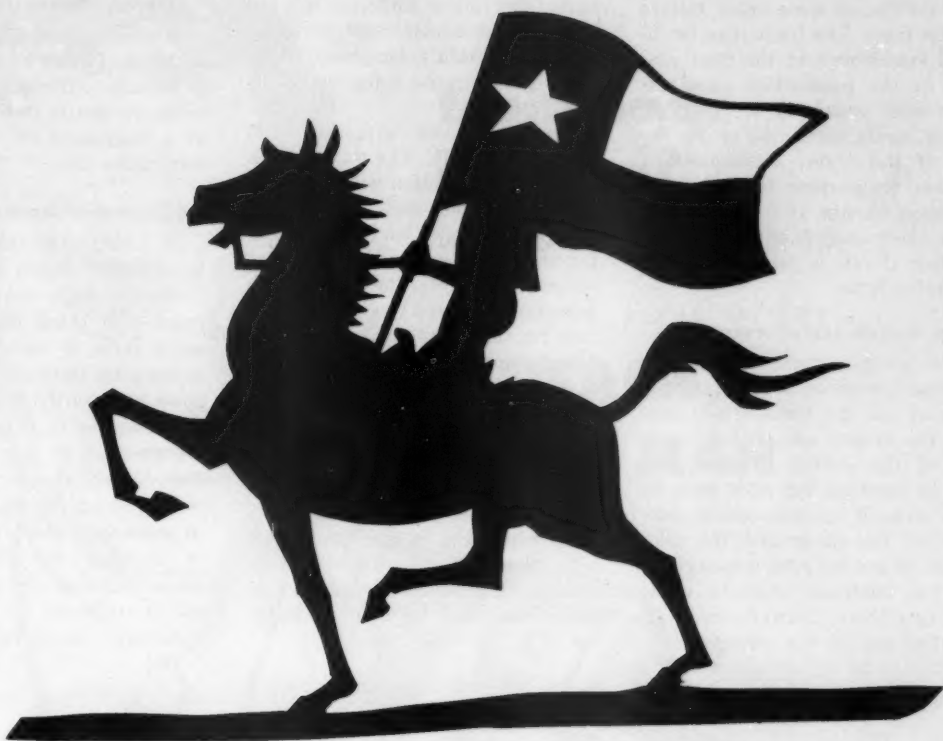
With fixed-setting thermostats, the dryer may have from one to three pushbuttons on the control panel, giving the housewife a choice of drying temperatures, depending on the type of load. They are usually snap-action thermostats, either of the hydraulic action, or bimetal type. The sensing element is located in the exhaust air of the dryer. Electrically, it is wired in series with the main burner valve.

High temperature limit switch

In addition to the cycling thermostat, there can be one or more high temperature limit switches which prevent overheating of the dryer. Such overheating can be caused by a condition, such as failure to clean out the lint trap, blocking of the



This is the first of a two-part series by gas expert Ed Wechsler. Part 2, standing pilot clothes dryer control systems, will appear next month.



...standard bearer

Sid Richardson Gasoline Co. is the standard bearer in contract customer LP-Gas Service.

- Always competitive in price and value.
- Always on time with top quality product.
- Not in competition with its customers through company-owned wholesale or retail outlets.

We invite you to join the parade of satisfied Richardson customers.

Sid Richardson GASOLINE CO.

629 FORT WORTH CLUB BUILDING • FORT WORTH, TEXAS

REGIONAL REPRESENTATIVES

H. M. JONES
5123 NO. NEW JERSEY
INDIANAPOLIS, INDIANA

MARVIN L. DOSS
1118 GREEN STREET
ABILENE, TEXAS

B. E. PATTON
6446 XERXES SQ.
MINNEAPOLIS, MINN.

duct system, or some other failure of this type. The limit may be located somewhere in the duct system, in the combustion chamber, or in close proximity to the main burner, again depending on the design of the dryer. Regardless of location, its purpose is to shut off the main burner and pilot, if the dryer overheats. Such a high temperature limit is usually of the bimetallic type.

Warp switch transformer

The warp switch transformer combination serves a dual purpose. First of all, the transformer supplies the proper voltage for operation of the electric ignition system, in igniting the pilot gas. In most cases, it operates under command of the timer and the pilot switch. When the pilot is energized, and its electrical contacts close, the ignition transformer is switched out of the electrical cir-

cuit. The other function of the warp switch transformer combination is as a safety component. This is provided by the warp switch itself.

Previously, we discussed 100 per cent shut-off. The warp switch works in conjunction with the pilot valve, to make certain that the pilot gas is cut off and stays off, if for some reason the pilot does not successfully light. The warp switch is factory adjusted to give adequate time for the pilot to make a successful attempt to light.

An additional function of the warp switch is to break the circuit to the electric ignition coil, if for some reason the pilot does not light. In other words, as a part of the 100 per cent shut-off function, when gas is cut off to the pilot, the igniter circuit is broken, preventing continuous operation of the igniter, and its eventual burn-out.

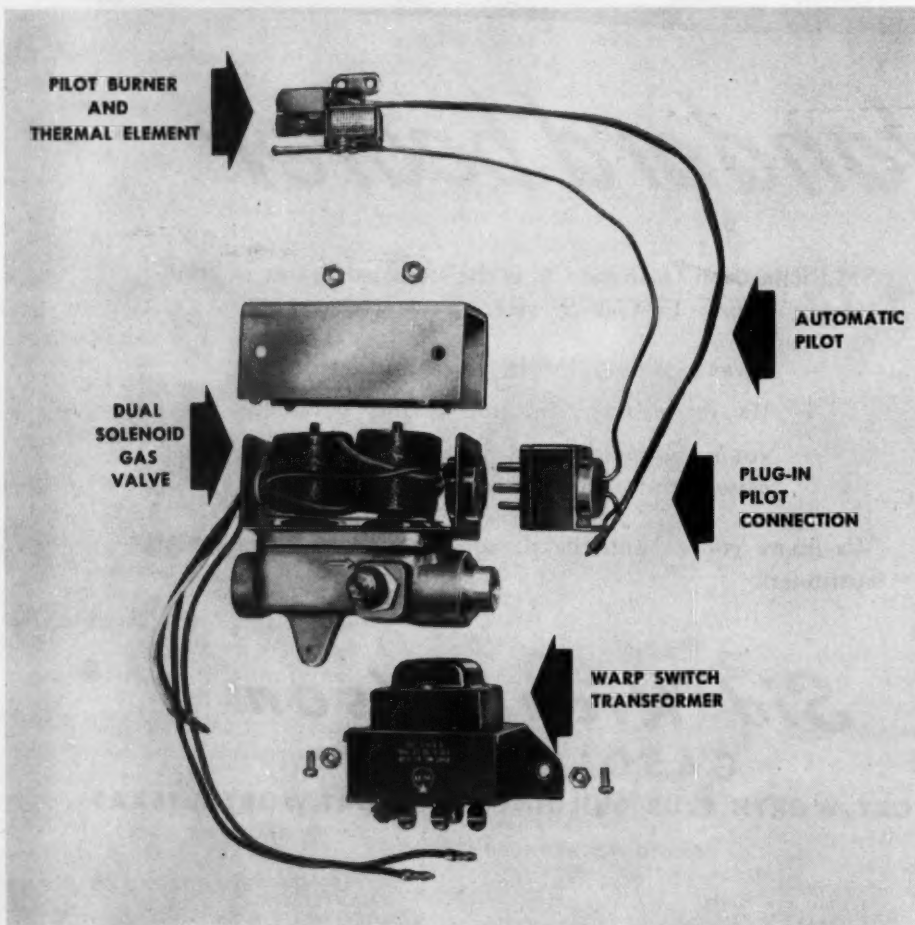
Gas pressure regulator

A pressure regulator is included in the L. P. gas supply system. It is usually adjusted for 11-in. w.c. pressure and is considered here to be a component of the supply system rather than of the dryer itself.

Additional components

In addition to the controls outlined above, which we consider to form the main control system, a number of other electrical components serve in some way or other to complete the control system, and must necessarily be considered in servicing the L. P. gas-fired dryer. An example of this might be the door switch, the purpose of which is to shut off the main burner, and in some cases the pilot, in addition to stopping the drum rotation, when the door is opened during the drying cycle.

In most cases, the dryer motor



Components of an electrically ignited gas clothes dryer control system.



**trainload?
carload?**

whatever your need

we want your order...

so **REACH,
L.P.G. MAN**

Anchor has the facilities to meet your need, whatever or wherever it is. And moreover, Anchor wants your order . . . wants you as a customer. They'll go out of their way to see that you are given every service humanly possible. Anchor's nation-wide facilities are of the most modern. Anchor men are skilled and experienced. There is one near you. So, reach, L.P.G. man, for that phone. Call Anchor in Tulsa, CHerry 2-7261.

ANCHOR

PETROLEUM COMPANY • TULSA

SALES OFFICES: Toledo, Sioux City, St. Paul, Shreveport, Hattiesburg, Gulfport, Savannah, Oklahoma City, Houston, Midland, Long Beach, San Francisco, Seattle, Calgary



ELECTRIC IGNITION SYSTEM

Step from cold start	OBSERVATION					POSSIBLE CAUSE	HOW TO CONFIRM CAUSE	POSSIBLE REMEDY
	Cabinet Light	Motor	Ignitor Coil	Pilot Flame	Main Burner Flame			
1.	Off	Not Running	Not Glowing	---	---	A. Dryer unplugged. B. Open fuse. C. Open circuit in timer.	A. Check electrical connections. B. Observe fuse. C. Check continuity thru timer contacts.	A. Restore power to dryer. B. Replace fuse. C. Clean timer contacts, or replace timer.
2.	On	Not Running	Not Glowing	---	---	A. Motor overload protector open. B. Door switch contacts open.	A. Check continuity thru motor overload protector. B. Check continuity thru door switch.	A. Replace motor overload protector. B. Replace door switch.
3.	---	Running	Not Glowing	---	---	A. Broken ignitor lead. B. Poor connection at ignitor. C. Open circuit in warp switch. D. Pilot contacts open. E. Broken ignitor. F. Open circuit in transformer. G. High temperature limit switch contacts open.	A. Check ignitor leads. B. Check ignitor terminal screws. C. Check continuity thru warp switch terminals "Q" & "W". D. Check continuity thru terminals 3 & 4 on pilot switch. E. Visually inspect. F. Hold #2 cell flashlight bulb across transformer ignitor terminals. No light indicates open transformer. G. Temporarily short-out limit switch.	A. Replace ignitor leads, or ignitor assembly. B. Tighten screws. C. Replace warp switch, or warp switch-transformer. D. Replace pilot switch assembly. E. Replace ignitor assembly. F. Replace transformer, or warp switch-transformer. G. Replace limit switch.
4.	---	Running	Glowing	No	No	No or Insufficient Pilot Gas Caused By: A. Main line or pilot gas cock closed. B. Air in gas line. C. Blocked pilot orifice. D. Low gas pressure. E. Blocked pilot port. F. Open circuit to pilot valve coil.	A. Check visually. B. Attempt to light pilot manually. Blowing lighter indicates air. C. Remove and inspect orifice. D. Check pressure with manometer. Should be 3" to 3½" (11" LPG). E. Visually inspect. F. Check electrical continuity to pilot valve coil.	A. Open main line or pilot gas cock. B. Bleed air from line. C. Clean with solvent. D. Check line pressure. Notify utility if low, or replace LPG tank. E. Clean ports. F. Repair open circuit, or replace coil.
5.	---	Running	Glowing	Yes	No		A. Check with manometer. Should be 3" to 3½" (11" LPG). B. Remove and inspect orifice. C. Check orifice size with instruction manual. D. Visually inspect E. Visually check flame. F. Visually inspect. G. Visually inspect element.	A. Check line pressure. Notify utility if low, or replace LPG tank. B. Clean with solvent. C. Replace with proper orifice. D. Clean ports. E. Clean primary air holes, or lint screen. F. Straighten pilot shield. G. Replace pilot switch assembly or thermocouple.
6.	---	Running	Not Glowing	Yes	No	A. Open circuit in cycling thermostat, or high temperature limit. B. Open circuit in pilot switch. C. Open circuit to main burner valve coil.	A. Check electrical continuity thru thermostat and limit. B. Check continuity thru pilot switch terminals 2 & 4, with pilot lighted, and switch unplugged from valve. C. Check electrical continuity to main burner valve coil.	A. Replace thermostat or limit. B. Replace pilot switch assembly. C. Repair open circuit, or replace coil.

--- Indicates not important in observing this step.

Step from cold start	OBSERVATION					POSSIBLE CAUSE	HOW TO CONFIRM CAUSE	POSSIBLE REMEDY
	Cabinet Light	Motor	Ignitor Coil	Pilot Flame	Main Burner Flame			
7.	---	Running	Not Glowing	Yes	Yes. Valve chatters or cycles too often	Pilot Flame Insufficient To Heat Bulb Because: A through F in #5 above apply here also. G. Pressure regulator sticks, causing pilot flame to drop. H. Blocked exhaust, causing pilot to sputter out.	A through F in #5 above apply here also. G. Check regulator action with manometer. H. Inspect Lint trap and vent pipe.	A through F in #5 above apply here also. G. Tap regulator. If condition persists, replace regulator. H. Clean lint trap, and vent pipe.
8.	---	Running	Not Glowing	Yes	Yes, valve is buzzing	A. Low line voltage. B. Poor electrical connection. C. Dirt on valve plunger, or in plunger tube.	A. Check with volt meter. B. Check electrical continuity thru all connections, particularly to gas valve. C. Remove valve head and inspect.	A. Report to utility. B. Repair poor connections. C. Carefully clean plunger, tube, and valve seat.
9.					Yes, valve does not close when power is disconnected	A. Dirt on valve seat.	A. Remove valve head and inspect.	A. Clean valve seat carefully.

--- Indicates not important in observing this step.

the electrical heater, operating the warp switch, is energized. This switch is set to operate in approximately four minutes, if the pilot is not lighted by that time, or if the pilot switch has not closed the contacts to the main burner solenoid. Therefore, if the pilot has not heated, the thermal element during this four-minute period heats to a temperature where the pilot switch operates, the warp switch will open its contacts and cut off gas to the pilot, as well as de-energize the ignitor coil. The dryer will remain in this status until the timer runs its complete

course. Additional attempts can be made to relight, but if the same condition exists, the dryer will lock out each time. A service call is then in order to determine the reason for the failure to light.

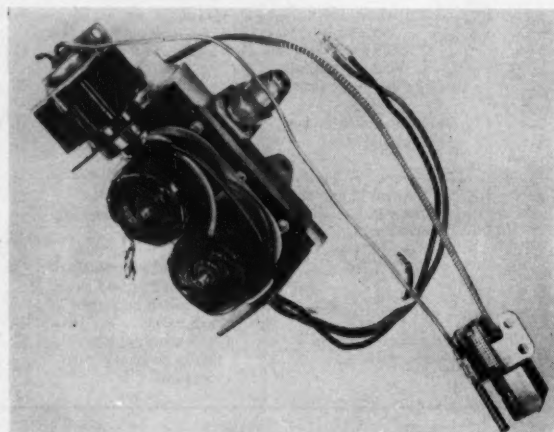
Service hints

As in the case of any other appliance, trouble-shooting cannot be comprehensively outlined in a text. Because of the infinite number of possibilities, the L. P. gas dryer serviceman must have a basic knowledge of the system, so that he can follow a logical sequence in finding the source of trouble. It

is possible, however, to outline in its broadest form a suggested servicing approach, based upon a given set of symptoms. We are including here such an approach, in the form of a chart.

Of course, a chart cannot begin to completely cover every type of system in the field today. However, based upon the conventional electric ignition system used by most dryer manufacturers, the following four column chart is offered. Column 1, under the heading "Observation," is the original report of trouble, or that which is observed by the serviceman. Column 2 lists a number of likely causes which might cause or contribute to the observed problem, as given in Column 1. Column 3 suggests a means of confirming the cause, or further diagnosing the problem. Obviously, there are many excellent means for confirming the cause of the trouble, but the ones listed in this chart are the most likely to be used by a serviceman with a minimum of equipment. Column 4 suggests a remedy, which in some cases is only to replace a particular component. Where this latter suggestion is made, it is usually based upon the fact that that particular component cannot be repaired in the field. ■

Dual solenoid gas valve shown without its cover and with an automatic plug-in pilot.





She Shops for HEATING, too

... and she'll love the NEW

It's A Wonderful Line for '59 . . . geared for Comfort, styled for Modern Living. Models for every practical need, every budget. Built to standards that win Customer Esteem . . . serve in a manner to make Dealerships profitable.

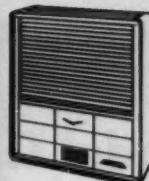
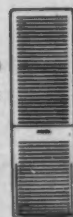
• The BRILLIANT FIRE Line ranges from 8,000 to 70,000 Btu.

FOR NATURAL • MANUFACTURED • MIXED • LP-GASES

THE OHIO FOUNDRY & MFG. CO. "America's Finest Since 1846" STEUBENVILLE, OHIO

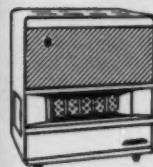
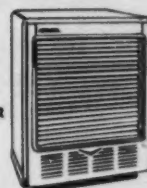
*America's
Finest*
FOR '59

RECESSED
WALL
HEATERS

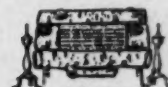


SEALED UNIT
WALL HEATER

WINTER
AIR
CONDITIONER



VENTED
CONSOLES



FIREPLACE
MODELS

UTILITY
MODELS



*Brilliant
Fire*
Heaters

*Write for
Catalog '59
Now* ➔



Henry J. Aust, general manager of Model Gas Sales & Service, Belle Mead, N. J., is putting the British make Pye two-way radio into one of his trucks.

How radio gives Model Gas an 'office on wheels'

WILLIAM T. HARPER • Eastern Editor



"IT'S like having an office on wheels," says Henry J. Aust, general manager of Model Gas Sales & Service Inc. of Belle Mead, N. J., when he speaks of the two-way radio system he has set up between his office and his 11-truck fleet.

"I can be driving along a road, suddenly think of something, and all I have to do is pick up my speaker and tell the girls in the office what I want done. Without it, I'd probably forget the thing."

Mr. Aust and his eight-man crew cover an area within a 40-mile radius of his headquarters on Route 206 in central New Jersey. Of his 3700 customers, 1600 are bulk and 800 are on meters.

At present he has seven two-way radios. Five of them are Du Monts, one is a Motorola and one is a British Pye—the latter two being interchangeable in any one of four vehicles. This is a simple operation which takes only a matter of seconds and requires no tools. The radio units are easily lifted from brackets which hold them under the dashboard of the vehicle and

are transferred to another vehicle where they are attached to its power system.

Mr. Aust has one of these radios with him at all times and this makes him always available, via the airwaves, to cope with any problem which may arise at the office.

One of the biggest aids provided Mr. Aust's business by the radio



Margaret Musa, member of secretarial staff of Model Gas Sales & Service, contacts driver of tanker via two-way radio to transmit emergency call from customer for service.

setup is in rapid handling of emergency calls.

"Before, when we got a call from a customer, we'd have to try to reach one of our trucks by telephone and maybe the only one available would be 15 miles away from the customer by the time we contacted him," Mr. Aust relates. "Now, we can get any truck within 10 minutes because we have all the men call in periodically and we know where they are all the time."

"Another thing: We might get a call for service and we know one of our trucks will be coming past that neighborhood soon. So, all we have to do is contact that truck and he performs the service. Otherwise, he'd probably have to come all the way into the office and then double back."

It is also a big help to him in solving problems arising from his diversification of loads. The radio setup allows him to contact a truck after it has left headquarters; it can then pick up the remainder of another's truck route after the first one has run out of fuel.

Of course, with his load diversi-



TEXACO DISTRIBUTORS GET DEPENDABLE SUPPLY IN THE MONTHS THEY NEED IT!

Use of LP-Gas is increasing rapidly, but Texaco Distributors are assured of dependable supplies *all the time*. That's because Texaco is one of the largest producers, and has a new fleet of tank cars for fast delivery.

Here's proof that teaming up with Texaco means a solid future: 683 distributors of Texaco products have been on the Texaco team for twenty years or more—many others for as

long as forty-five years.

5 reasons why it pays to be a Texaco LP-Gas Distributor

1. A product of highest quality—moisture-free.
2. Dependable and efficient delivery, in a new fleet of tank cars, from 25 strategically located production areas.
3. Immediate acceptance. Texaco LP-Gas is sold under the nationally-known,

famous trade-mark, the Texaco red star with the green "T".

4. One of the largest producers of LP-Gas, The Texas Company is the only petroleum company to build up successful distribution of its products throughout the U. S. A.

5. Profitable and proved sales policies. Texaco does not compete with its independent distributors of LP-Gas.



Team your name with Texaco and profit. Some areas are still open for a sound and profitable business with Texaco LP-Gas. Let us tell you how. Call or write today... The Texas Company, LPG Sales Division, P.O. Box 2420, Philtower Bldg., Tulsa, Okla., Diamond 3-4101; 3350 Wilshire Blvd., Los Angeles 5, Cal., DUNkirk 5-0515.





The team which coordinates activities of Model Gas. (Left to right), Henry Aust, general manager, Edward Aust, plant and maintenance manager, and Richard Aust, service manager. Use of radio in company trucks has brought about better directed control of deliveries.

fication, the routing problem is intensified. He has a large acetate sheet on the wall of his office and the routes are set up and marked off with red and black China pencils.

"We service homes every month and most househeating and industrial customers on a two-week basis," says Mr. Aust. "Of course, we have to watch for the abnormal loads during the canning season.



Richard Aust, service manager of Model Gas, speaks into hand-mike to contact company headquarters via two-way radio.

But we have our routes pretty well figured out. We manage to serve a lot of people on double-backs, and that's where the radio comes in handy."

Then there is the matter of financial gain. Mr. Aust estimates the radio setup saved him more than \$300 in telephone calls alone in a single year. It also saved "more than 10 per cent" in the running expenses of his trucks.

His radio station has helped bring in about 10 new customers per week, offsetting (and then some!) the average of one per week lost to the gas utilities through main extensions.

His fleet consists of one 2200-gal. double-bbl tanker, one 1800 single-bbl, one 1200 double-bbl and one 1200 single-bbl plus four cylinder delivery trucks, two utility service trucks and one boom-and-winch maintenance truck. The latter three are converted telephone company vehicles.

Eighty per cent of Mr. Aust's customers are domestic, located in an area which ranges from Princeton to Newark to the seashore points. He also numbers among his customers some large construction outfits, roofers and farmers.

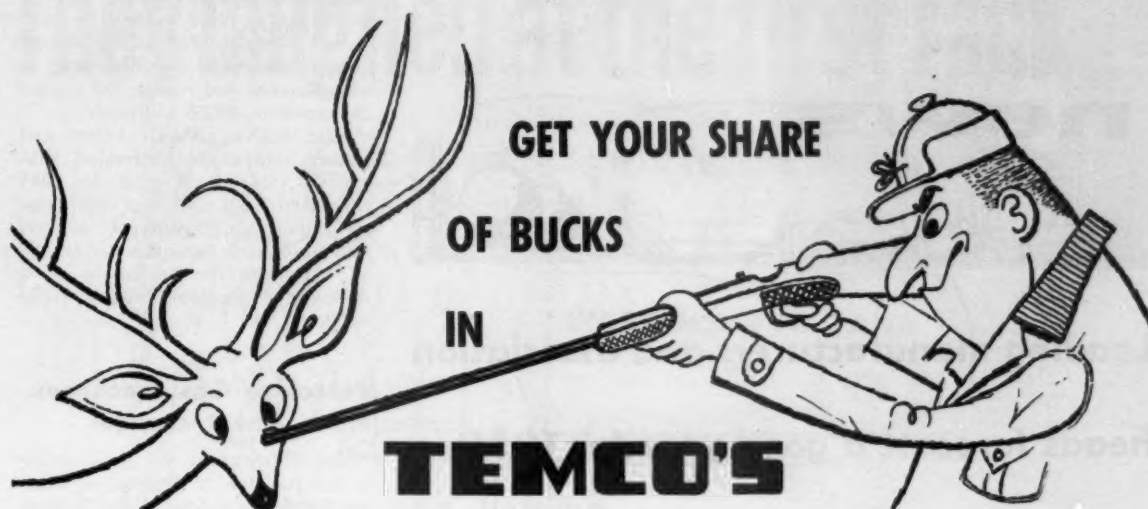
"We sold 5000 100-lb cylinders to roofers last year," he says.

"Farmers use a lot of our LPG for brooding and we get a lot of orders when they want to do grain drying. We rent salamanders and we also sell to five schools in this area."

Mr. Aust credits a good deal of this expansion of his business to the radios. For one thing, they enable the company to serve more and more customers during the peak-load seasons. This, plus the rapidity of the service, leads to increasing customer satisfaction, which in turn, leads to more customers.

And radio has been teamed up with LPG carburetion to stretch the useful life of his trucks. Five are now burning LPG. At up to 50,000 miles they are still purring smoothly with little maintenance and no overhauls. At the same time, radio has held down on their mileage.

The result: more *useful* mileage per truck with radio, less deadheading and waste mileage; more trouble-free mileage with LPG carburetion. ■



FREE "DOLLARS for DEALERS" PROMOTION

Ask your Temco gas heating distributor about this "out-front" dealer promotion inspired by the

"out-front" CITATION LINE for '59

During the first six months of 1959 Temco gas heating dealers across the country will receive FREE "DEALER-DOLLARS" which they may spend during the last six months of 1959. (These bucks are pre-shrunk and are worth 100 pennies per dollar). Join the happy hunters now and cash in . . . your Temco distributor has all details.



TEMCO, Inc.

NASHVILLE 9, TENNESSEE

Ask your **TEMCO** distributor for full details

news



Leading manufacturers and association heads forecast a good year for 1959

Appliance and equipment manufacturers and association heads predict that sales in their respective industries will increase nicely in 1959 over last year.

"All indications are that 1959 can be a big year for all appliances," says F. H. Guthrie, president of the Institute of Appliance Manufacturers. "We have estimated an increase in appliance sales of 8 per cent across the board."

It is predicted that gas appliance shipments in 1959 will top 1958's total by 9.1 per cent. This was determined through analysis of a poll of manufacturers who usually account for 70 per cent of the industry's output of household and commercial gas equipment. Replies to a questionnaire issued by Edward R. Martin, director of marketing and statistics for GAMA, showed that only 33 of 286 individual responses anticipate a business decline in the new year.

Judson Sayre, president of Norge division of Borg-Warner Corp., manufacturing a complete line of appliances has this to say:

"In 1959 we anticipate that major home appliance industry total sales will exceed those of 1958 by nearly 5 per cent. Setting the pace, as it has for the past few years, will be home laundry equipment. The return of the consumer to the marketplace will be the brightest spot in the 1959 picture."

"A 22 per cent increase next year in installation of year-round home air conditioning systems over 1958 is expected by the industry" according to John W. Norris, president of Lennox Industries Inc.

Of this increase, Mr. Norris said, new housing will show a 30

per cent increase in air conditioning, with 10 per cent in conversions of existing homes.

T. T. Arden, president of Robertshaw-Fulton Controls Co., predicts that 1959 will be a "good year" for the controls industry, and that beginning in 1960, there may be a "tremendous upsurge" as part of the next cyclic growth of the nation's economy, strengthened by predictable new family formations.

"We look to 1959, and the years immediately ahead, for a vigorous expansion of markets for automatic controls, and for a healthy condition of business in general," Mr. Arden stated.

"The business recovery which has occurred in the third and fourth quarters of this year offers a healthy sign for 1959," states A. P. Hirsch, chairman of the board of the Welbilt Corp. "The home construction industry is booming and there are more retail outlets handling our type of product than ever before. This, with the continuing increase in family households—over 51 million today as compared with 40 million in 1950—serves as our barometer regarding the purchasing power of the trade and the consumer for the coming sales year."

"Total construction performed in the United States, after breaking dollar volume records in the face of the general business decline of 1958, stands a good chance of reaching the \$72 billion mark in 1959 with a 6 per cent advance," the Associated General Contractors of America said.

The forecast for 1959 is divided into \$52.2 billion in new construction and nearly \$20 billion in

maintenance and repair, while work put in place in 1958 is estimated at nearly \$49 billion in new construction and \$18.6 billion in maintenance and repair, for a total in excess of \$67.5 billion.

The AGC's annual review and outlook statement estimated that construction of all types in 1958 increased 3 per cent over 1957, and saw increasing contract awards and improving economic conditions as heralding the beginning of a new era of construction growth in 1959.

Petrolane Gas announces management changes

Appointment of W. A. Coglizer to the position of director of market development and Glenn Filbert as director of employee and customer relations head a list of management changes announced by Petrolane Gas Service Inc., Signal Hill, Calif.

Mr. Coglizer was formerly manager of advertising and sales promotion and will continue as director of Petrolane advertising. Sales promotion will be carried on at the local levels. Mr. Filbert was formerly manager of operations of Petrolane's southern division.

Richard Thuneman has been appointed regional manager of sales and operations, encompassing the area from Morgan Hill, (northern) Calif. south to the Mexican border and including the San Joaquin Valley and the Pacific coastal areas.

William Bonner has been named division manager, sales and operations, Los Angeles Basin division: Cy Shaddy is now regional manager for the California desert, southern Nevada, and St. George, Utah; Fran Doles is acting division manager, southern Idaho; Eugene Sheridan has been made district manager, Oakford Gas Co., Long Beach, Calif.; and Gerald McCaffery is district manager, Van Nuys.

Hibshman is National Propane's vice president

Howard W. Hibshman was recently elected to the position of executive vice president of National Propane Corp.

Prior to joining National Mr. Hibshman had been vice president of O. A. Sutton Corp. and president of the Vornado Distributing

They laughed at the first tank...



...but how wrong can you be...

THE MODERN MASTER PROPANE TANK

Manufactured by THE OLDEST PROPANE TANK MANUFACTURING PLANT IN THE WORLD



Back in the 30's they laughed at "those daffy looking tanks." That was when the first Master domestic tanks made their appearance. From the start they were a success, despite the men who thought bottle delivery was the only way. The domestic tank started a new, practical, economical way to deliver gas that built volume . . . simplified dispensing. Master Tank & Welding, believed to be the oldest manufacturer, who is still in business, of domestic propane tanks in the world, will continue to produce THE FINEST TANK MONEY CAN BUY.

SOLD from QUINCY, ILLINOIS or DALLAS, TEXAS



Order your storage and transports from the Master plant nearest you. Shipments made by truck, railroad or low cost river barge.

2000 S. Front St. • Quincy, Illinois • Baldwin 3-5014
P. O. Box 5146 • Dallas, Texas • Riverside 7-2441



TRANSPORTS



TANK TRUCKS



STORAGE



DOMESTIC



FILLING STATIONS



FARM CARTS



REFINERY



LINE PIPE

Co., Wichita, Kans. His record of experience also includes important executive positions in Hotpoint division of General Electric, and Bigelow-Sanford Carpet Co.

Donnelly will manage A. O. Smith's new division

A reinforced plastics division with James F. Donnelly, Sr., as general manager has been formed by the A. O. Smith Corp., Milwaukee, Wisc., it is announced by F. S. Cornell, executive vice president.

Mr. Donnelly said the new divi-



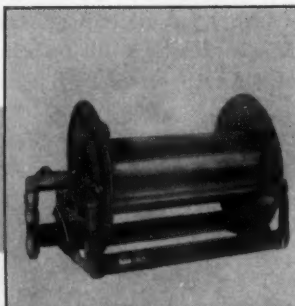
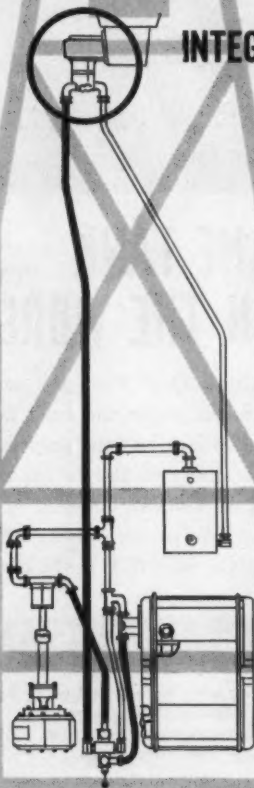
Pyrofax Gas Corp. recently honored 25-year service personnel with a luncheon held at the Uptown Club in New York City. Those receiving awards were: (left to right) Earl T. Atkins, H. H. Bauman, Walter A. Naumer, president, who presented each man with an inscribed wrist watch, Paul W. Smith, and Kenneth L. Helper. Miss Lillian Norris (not shown), the only woman so honored, received an inscribed living room clock, as well as a 25-year certificate.

NOW FROM HANNAY

INTEGRAL HYDRAULIC PTO

The integral power take-off and hydraulic pump from HANNAY eliminate mounting saddle, jack shaft and universal joints.

For efficiency, economy and flexibility in hydraulic LP-Gas delivery, *SPECIFY* hose reels and hydraulic components by HANNAY . . . first choice among progressive LP-Gas dealers.



Hose Reels by

HANNAY

See your LP-Gas Equipment Supplier or write to Hannay for complete hydraulic delivery information.

CLIFFORD B. HANNAY & SON, INC., WESTERLO, NEW YORK

sion would manufacture reinforced plastic pipe, and other products, which would have a wide application in the liquid petroleum gas industries, as well as in other fields having corrosion problems.

Home clothes dryer promotion is underway

A nationwide promotion to spur the sales of automatic home clothes dryers has just been announced by the dryer division committee of the American Home Laundry Manufacturers' Association in conjunction with Indian Head Mills, Inc.

The campaign which will have as its theme, "Buy a Dryer . . . It's Surer Than Sunshine," will utilize Indian Head's Pequot Easy-Care No-Iron sheets and pillow cases as a premium. According to the announcement, the promotion will be a "cooperative tie-in for manufacturers of home laundry equipment, distributors and dealers, designed to sell automatic clothes dryers through the demonstration, display and use of the sheets.

In explaining the decision to use the sheets and pillow cases as premiums, William L. Hullsiek, chairman of the Association's Dryer division committee, said the no-iron sheets offered "dramatic proof to consumers of the time, labor and money-saving advantages of owning and using an automatic clothes dryer."

New, lower priced PREST-O-LITE Cylinder TRADE-MARK LEADS THE PARADE!



The big reception given the new PREST-O-LITE P-100-N Cylinder justifies all of LINDE's efforts to make it possible. You'll cheer, too, when you discover the safety and quality features of other PREST-O-LITE Cylinders in this new 100-lb. version.

All PREST-O-LITE Cylinders have these and many other quality features—

MARKINGS CAN NEVER WEAKEN CYLINDER WALLS

Controlled, precision imprinting provides complete safety for markings on P-100-N. Wide, integral flange on P-100-W takes all markings. Heading contains markings on P-100-R.

SINGLE-SEAM, TWO-PIECE DESIGN

High-strength alloy steel shells are joined by automatic UNIONMELT Welding on all PREST-O-LITE Cylinders.

Choose now from *three* 100-lb. PREST-O-LITE Cylinders: New P-100-N provides streamlined efficiency at lowest cost. Deluxe P-100-W with the wide flange offers topmost quality—the finest LP-Gas cylinder you can buy! And the P-100-R is built with a sturdy heading, for those who prefer this style.



P-100-N

P-100-W

P-100-R

For other details and prices, call or write your nearest LINDE office. LINDE COMPANY, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, N. Y. Offices in other principal cities. *In Canada:* Linde Company, Division of Union Carbide Canada Limited.

Linde
TRADE-MARK



The terms "Linde," "Prest-O-Lite," "Unionmelt," and "Union Carbide" are registered trade-marks of Union Carbide Corporation.

Complete kits enumerating the important features of the no-iron sheet, telling how it can help the sale of dryers and listing the advantages of tying in with the promotion are being sent to key people among the 18 manufacturer members of the AHLMA who make almost 100 per cent of the washers, dryers and ironers produced in the United States.

Tuloma Gas Product Co.'s operations are expanded

Operations of Tuloma Gas Products Co. have been expanded to include all liquid products and sulfur produced in natural gasoline and cycling plants. Tuloma had previously marketed only L. P. gas products.

As a part of the expanded marketing program all sales formerly handled by its affiliate, Pan American Petroleum Corp., have been assigned to Tuloma. The products are marketed from 28 plants operated by Pan American, or in which Pan American has an interest. The two companies are headquartered in Tulsa.

The company is currently installing underground storage facilities near Hutchinson, Kans., and Houston, Texas. In addition, it is a joint owner of a mined underground storage facility in Alabama. Many of the Pan American plants from which Tuloma markets also have large volume underground storage facilities.

Federal fair trade fight warming up again

The fight for a new federal fair trade law is warming up.

Groups backing the proposal include the drug industry, men's clothiers, appliances and similar groups, and organizations formed solely to fight for fair trade.

The measure to be sought this year will be similar to one which after long hearings got only as far as approval of the House Commerce Committee last year. This measure was sponsored by Rep. Oren Harris (D), Ark., in the House, and by Sen. Hubert Humphrey (D), Minn., and others in the Senate.

Sen. Humphrey and Sen. William E. Proxmire (D), Wisc., both have promised to introduce the legislation early in the new congressional session to give it an early start. Sen. Humphrey and Rep.

Propane torch is a lifesaver

A portable emergency propane cutting outfit, light enough to be taken on high or hazardous climbs, has been invented and is now being marketed by William Griffith, president of Gas Arc Supply, Philadelphia. The kit, designed principally for firemen and other rescue personnel, has the mobility that other units now on the market lack, according to Mr. Griffith.

The kit is housed in a compact spot welded all-aluminum case, measuring 26½ in. high, 15¼ in. wide, and 7¼ in. deep. The entire unit weighs only 46 lb, and is equipped with a criss-cross web with which it may be strapped to the user's back.

The upper section of the case, which is removable, contains a drawer which houses a complete set of accessories, including special split-lens goggles, gloves, spark lighter, wrench, spare tip, inhalator, and instruction book.

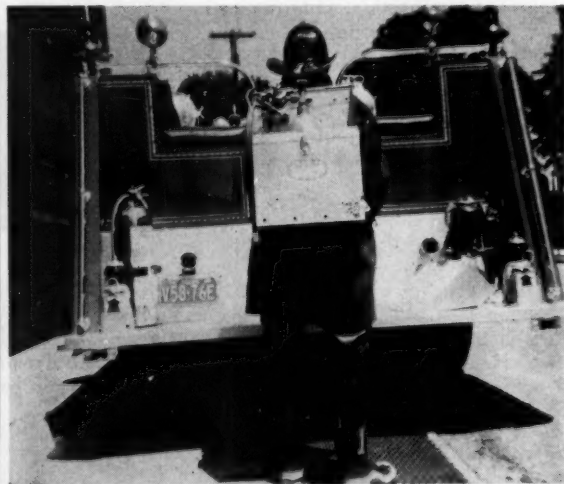
The case itself holds oxygen and propane cylinders and appurtenant fittings, and 10 ft of dual hose. The moment the top is removed, it is ready for operation. The disposable gas cylinder holds enough propane for 2 hours' cutting of 1½ in. steel; when it is empty, a reserve cylinder, which is mounted adjacent to it, can be cut in. The oxygen is refillable.

The kit can serve double duty as an inhalator. Up to 6 liters of pure oxygen can be fed through a needle valve take-off on the outlet of the oxygen regulator, through a plastic hose and mask which are carried as part of the kit equipment.

Principal markets for the kit will be fire and police departments, safety departments of industrial plants, disaster rescue squads, and Civil Defense units (the kit meets and exceeds CD specifications). Distribution will be primarily thorough safety equipment companies.

Admittedly no load builder, the kit has possibilities for indirectly benefiting the LPG dealer. Firemen, many of whom still need educating on the properties of the fuel, would have an opportunity to become better acquainted with it. They would be less likely to pin blame for fires of unknown origin on LPG. There are thousands of CD volunteers who are prospective customers; a closer association with propane would at least make them aware of its value.

It has publicity possibilities, as well. The welding and cutting market is a good one, and "official acceptance" of LPG by a city's fathers would carry a good bit of weight. ■



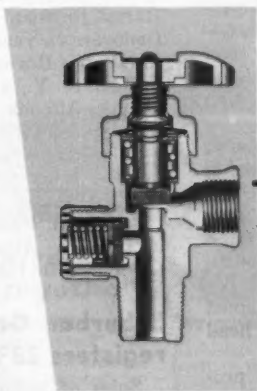
Fireman, all set for high climb, wears kit in position for rescue work.

The LPG valve with the LARGER... TOUGHER metal diaphragm

- ★ **Fills Faster!**
- ★ **More Rugged Construction!**
- ★ **And a far better Safety Device!**

The Sherwood Valve was purposely designed with a larger metal diaphragm in order to exceed 25 gallons per minute filling at 100 PSI pressure drop across valve. *This means FASTER FILLING!* These larger diaphragms are fabricated from premium metal alloys that are impervious to liquefied petroleum gases. A real quality plus.

Then for safety . . . is added a C.G. 7 or 8 safety relief valve, with specially formulated rubber seat, that allows 700 CFM of propane to pass at 480 PSI pressure, allowing its use on any LPG cylinder up to and including 200# capacity. Available in 4 different models. These and many other exclusive features make Sherwood the most desirable LPG valve in America today. Add to all this our *fast* delivery and *interesting* price and you have several good reasons for asking us to quote on your next LPG valve requirement.



Here's your **VALUE PLUS!**

Highly polished stem head for smooth operation. Specially formulated lubrication. Tough bronze stem that cannot "freeze" or seize. Bigger, faster filling diaphragm of alloy impervious to LPG. Lower stem assembly is *one* (easy-to-replace) unit. Safety device is sufficient for use on 200# capacity LPG cylinders. More brass added in strategic spots in forging for years of extra service life.

Distributor territories still available in some areas. Write for details.

WRITE FOR THIS FACT FOLDER

For all the complete details, drop us a line for a fully illustrated, fact filled folder. For an informal quote, add a few facts to your letter about your requirements. NO SALESMAN WILL CALL UNLESS YOU REQUEST IT!



Sherwood Valve DIVISION
ALUMINUM AND BRASS CO., INC. LOCKPORT, N. Y.

Harris have promised to hold early hearings in the Senate and House on fair trade to avoid the last minute log-jam.

In addition, discount houses will be under sharp attack in Congress in 1959. Members of both political parties are planning to reopen investigations of discount operations, and the extent to which they are thinning the ranks of the nation's small retailers.

The Senate Small Business Committee, for example, has served notice that it intends to look further into discount house operations and the effect they have on established merchants. Public hearings probably will be held so as to focus public attention on today's retail pricing patterns and how they are affecting small business across the nation.

National LP-Gas Council dealer sales aids listed

In the past few months the National LP-Gas Council has released a variety of dealer sales aids to its members.

Included were store displays, handout pieces, and a list of 1259 prospective L. P. gas customers. The materials were prepared under the direction of the Council Dealer Sales Aid committee.

Below is a brief description of each of the sales tools recently mailed to companies supporting the Council program.

Gas Is Safest Chart—A large 12 x 20 in. display chart offers positive proof that gas has caused fewer fires and is safer than electricity.

Better Homes Ad Blowup—A 20 x 30 in. blowup of one of the Council's ads that appeared in *Better Homes & Gardens*.

Farm Kitchen Idea Booklet—A colorful 32-page booklet prepared by *Successful Farming* magazine contains hundreds of practical ideas on planning new and modernizing existing farm kitchens.

Gas Aids Sales Reprint—For reaching builders and architects, it provides details on how gas aids the sales of homes as well as data on all domestic appliances. It is a 32-page booklet reprint from *Practical Builder* magazine.

House Beautiful Building Manual—An article reprinted from *House Beautiful*. It covers the multiple uses of L. P. gas in the home. Reference is made to the Council's emblem in the article.

Gas Age Reprint—An account

"SAFETY IS EVERYBODY'S BUSINESS"

Copies of the widely-hailed safety training program for the L. P. gas industry "Safety is Everybody's Business," written by the late editor of *BUTANE-PROPANE News*, Carl Abell, are available for \$2.50 each from Mrs. Alice Abell, 1521 Ridgeway Drive, Glendale, Calif.

Printed originally as a series in BPN, the course has been successfully used by L. P. gas companies and major insurance companies across the nation. It is in 23 parts, each part containing a lesson, a suggested meeting program, and a discussion guide.

When originally published, the safety program won for *BUTANE-PROPANE News* the Pan American Insurance Co. Certificate of Meritorious Achievement and the National Safety Council's Public Interest Award.

The booklet contains 192 pages.

of how gas interests proved to a community that gas has many advantages over electricity for cooking.

Prospect List—A listing of 1259 potential customers compiled by the Council from recent inquiries which resulted from Council advertising and publicity. The prospect lists are mailed to members at frequent intervals.

New LPG infra-red heater soon to appear

An infra-red heater which operates on natural, propane or manufactured gas, will be available soon from the new Infra-Red division of Van Dorn Iron Works Co., Cleveland, Ohio.

According to Lawrence C. Jones, president, basis of the expansion has been months of intensive research, tests and survey of markets which have established a high potential for the division's production of infra-red heaters.

John S. McElwain was named division sales manager and head of the Infra-Red division.

Tests of the unit show it produces infra-red radiations more efficiently and economically than any generator currently available, said Mr. McElwain. Patents have been applied for the burner-generator which embodies no ceramic parts but utilizes metallic stretcher screens expanding with the cast frames.

Fuelane Corp. presents service pins to employees

Feldon Lindsley of White Sulphur Springs, N. Y., was presented with a 20-year service pin by

Charles M. Francisco, president of Fuelane Corp., at the company's silver anniversary dinner. The dinner was held at the Hotel Lenape, December 11. A. R. Atkins, Kingston, a member of the company's board of directors, also received a pin for 20 years of service.

Mr. Francisco presented service pins to the following: Roy R. Johnson, Ernest W. Kracke, and Melvin P. Fuller (15 years); Leonard T. Osterhoudt, Helen I. Kirk, and Marjorie C. LeRoy (10 years); Walter O. Smith, Edna Coyle, Elizabeth A. Haiss, Jacob Skinner, Harry Furman, and Walter E. Donovan (5 years), all of Liberty. L. Newton Hovey (10 years), Bainbridge, N. Y., and Paul Myers (5 years), Altoona, Pa., also received the service pins.

A special award for 5 years of service was presented to Jack Flynn, Pressed Steel Tank Co.

Alfred B. Pellam presented cash awards to Allen Schrader and Grant Smith for safe driving.

Suburban Gas Service Inc. registers 28% sales gain

Sales of Suburban Gas Service, Pomona, Calif., registered a 28 per cent gain for the first half of the fiscal year over the comparable period a year ago, W. R. Sidenfaden, president, announced recently.

Sales for the first six months ended Oct. 31, 1958, amounted to a record \$3,879,081 and net profit totalled \$161,811 equal, after preferred dividends, to 26 cents per share based on 530,272 common shares, the average number outstanding for the period.

For the 12 months ended Oct. 31, 1958, sales amounted to \$8,938,-

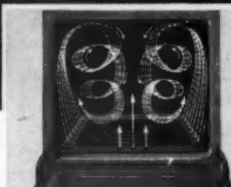
SELL the good cook's gas range ...famous for nearly four generations!



Illustrated: The Universal Supreme
40-inch gas range—Model 9192

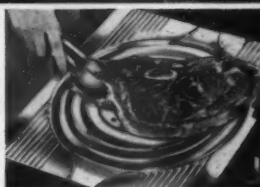
You and Universal sell better together

... because only Universal offers your customers the 3 "most-wanted" features in gas cooking! It's the famous brand name known and trusted for quality for 4 generations. Get the facts ... contact your Cribben & Sexton representative now!



"Air-conditioned" Baking

Exclusive Super Oven with built-in circulation control keeps heat better balanced for perfect baking. This even heat is constantly circulated ... no hot spots, no cold corners!



Smokeproof Broiling

Melted fats and greases can't smoke or burn because the specially designed broiler grille drains away and traps them in the pan underneath. Kitchens stay cleaner longer.



"Obedient Burner" Cooking

Each self-lighting burner obediently delivers the precise heat wanted, instantly. "Simmer-Save" feature permits an unlimited number of measured cooking heats.

Advertised in leading national magazines

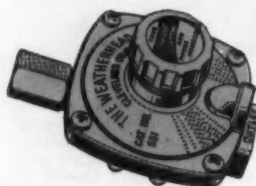
UNIVERSAL GAS RANGES

Cribben & Sexton Company, Chicago 12, Illinois. A complete line of domestic and commercial ranges, built-in ranges, dishwashers, space heaters and clothes dryers.

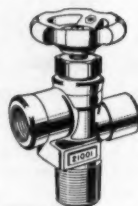


WEATHERHEAD Cylinder Package Plan

Setting your sights high for '59? Reach your sales goal more easily — seize a greater share of the LP-Gas market in your area with the Weatherhead Package Plan. One order gives you quick possession of all the equipment you need to satisfy new customer requirements... a complete LP-Gas system including cylinders, regulators, valves, fittings and changeover assemblies. Not only is your customer service easier with the Weatherhead Package Plan — you also achieve greater purchasing efficiency... get real dollar value through centralizing your buying activities.



Weatherhead 551 LP-Gem regulator
... featuring personalized dealer decals **FREE OF CHARGE** with minimum orders of 250.



Weatherhead 21001 valve
... for faster fill, easier shut off, more positive lift opening.

...Featured in...

WEATHERHEAD PACKAGE PLAN

**WARRANTY
PROTECTION ON
ALL WEATHERHEAD
LP-GAS PRODUCTS**



THE WEATHERHEAD COMPANY
LP-Gas Equipment Division
Cleveland 8, Ohio

The Weatherhead Co. of Canada Ltd., St. Thomas, Ont., Canada
Export Division - Cleveland Ohio - Cable Address: WEATHCO

SINCE 1919... 40 Years of Manufacturing Experience

418 and net profit totalled \$832,975 equal after preferred dividends to \$1.51 a share based on 518,149 common shares, the average number outstanding during the period.

Mr. Sidenfaden stated that despite the fact that the first six months sales were running well ahead of year-ago figures, because of the greatly expanded structure of the company, sales were below anticipated levels due to unusually warm weather through Suburban's marketing areas.

The report stated that since the beginning of the fiscal year, acquisitions made by Suburban have been well integrated into the company's overall operations. They are the Redi-Gas Co., Tacoma, Wash.; Red-Dot Gas Co. of Denver and Idaho Springs, Colo.; Bupane Gas Co., Victorville, Calif., as well as marketing plants in the Coachella Valley, Calif., and at Show Low, and Springerville, Ariz., and Glenwood Springs, Colo. Together these acquisitions raise the number of Suburban Gas Service marketing plants to 104 serving approximately 59,000 customers in eight states.

Home Gas Co. sold to M. E. Dahle, Minneapolis

Sale of the Home Gas Co., Minneapolis, Minn., to M. E. Dahle, Minneapolis, was announced by its former president, Eugene P. McCahill.

Mr. Dahle said the entire personnel of the firm and its affiliates will be taken into a new organization, to be called Home Gas Co.

Home Gas is an independently owned liquefied petroleum retail gas company. It maintains bulk plants and gas cylinder bottling plants at 16 locations with more than 500 dealers in Minnesota, North Dakota and Wisconsin.

J. B. Beaird expands Canadian operations

The J. B. Beaird Co. has announced a new permanent headquarters and assigned additional personnel to Beaird International Inc. in Canada.

Joining Charles W. Haynes, vice president of Beaird International in the new Calgary office, are sales engineers B. D. Cass and Murphy Horton. Mr. Cass will devote his primary attention to packaged compressor sales, while Mr. Horton will seek to develop the Canadian market for L. P. gas equipment

Mississippi Tank T-1 Transports have

"TOP PAYLOAD and Good Looks"



says A. R. Blossman, Jr., Ass't to the President
A. R. Blossman, Inc., Covington, La.

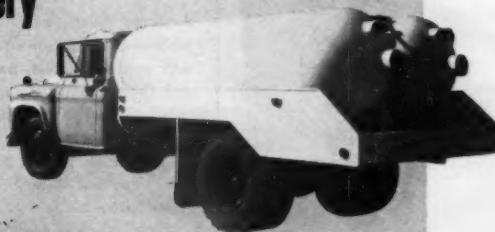


After a careful comparison of competitive products, here's why A. R. Blossman, Inc., decided to add Mississippi Tank T-1 Transports to its fleet: 1) **TOP PAYLOAD**—In addition to the extra payload allowed with lightweight T-1 steel, the precise balance of Mississippi Tank units means *maximum loading on every trip!* and 2) **GOOD LOOKS**—"It's good advertising to have attractive Mississippi Tank Transports rolling down the highway with your name on them," says Mr. Blossman. "We feel that the extra advertising value of these units pays off in a big way."

Check specifications and appearance and you, too, will decide—Mississippi Tank Transports are tops in every way!

"Paymaster" Twin-Delivery

Streamlined and beautiful, this unit is quality-engineered for perfect balance, maximum payloads and long, efficient service. Available with rear cabinets and full skirting in capacities from 1200 to 2300 wgs.



Let us show you how T-1 Steel equipment can pay for itself in a matter of months. Just use this coupon . . .



**MISSISSIPPI
TANK COMPANY**
INCORPORATED

Hattiesburg, Miss. Tel. JUNiper 3-0252

MISSISSIPPI TANK COMPANY Hattiesburg, Miss.

—Show me how Mississippi Tank T-1 steel transports can pay for themselves in just a few months.

Also send information on:

- Paymaster Twin Delivery
- Titan T-1 Delivery (3,075 wg cap.)
- Single Barrel Delivery Units
- Bulk and domestic storage tanks

NAME

COMPANY

ADDRESS

CITY and STATE

and other Beaird general products.

Mr. Horton formerly was chief inspector in Beaird's Shreveport plant, and Mr. Cass has served in Beaird's compressor sales office in Tulsa, Okla., since February 1957.

Simultaneously with the assignment of the sales engineers, new permanent headquarters for Beaird International have been established in the F. W. Clark Building in Calgary, Mr. Haynes reported.

Mr. Haynes said that Beaird is also exploring manufacturing facilities that may be feasible for fabricating Beaird products in Canada.

NEWS NOTES

Drillers Engine & Supply Inc., 5120 South Shields St., Oklahoma City 9, Okla., has been appointed Oklahoma and Texas Panhandle distributor for Hercules Motors Corp., Canton, Ohio. The Oklahoma City company, which also has a branch at 124 North Boston St., Tulsa 1, will handle Hercules' entire line of air-cooled and liquid-cooled engines (which include L. P. gas) and power units for automotive and industrial equipment.

The Ohio Injector Co. has opened branch warehouses in Houston at 2822 Canal St. and in Los Angeles at 3045 E. 12th St. The Los Angeles facility will be managed by W. E. McComas and the Houston operations will be managed by J. E. Marrin.

One million two hundred thousand dollars worth of Suburban Propane Gas Corp.'s sinking fund debentures, due in 1973, have been purchased by the New York Life Insurance Co. The remainder of the total issue of \$1.6 million has been purchased by Massachusetts Mutual Life Insurance Co. Proceeds will be used to acquire seven propane companies and to retire outstanding bank loans.

The full line of RCA Whirlpool home appliances will be distributed in the Atlanta merchandising area by Whirlpool Corp.'s new Southeast Sales division, 200 Ottley Dr., N. E. Atlanta, Ga. The new branch will take over the functions previously performed in the region by the Atlanta division of King's Appliance & Electronics Inc., which remains as RCA Whirlpool appliance distributor in its principal territory of Savannah. Named as general manager of the new sales division is Harold W. LeVan, until recently a special representative of Whirlpool's gas utility division in the New England area.

N & R Sales Corp. of Goshen, N. Y., has been appointed as Stampings Inc. representatives for its line of bottled gas housing equipment and the Pow-R-Spade trenchers in the northeastern area of the United States.

Clayton Manufacturing Co. has moved its Cincinnati headquarters into a new multi-purpose facility some ten miles northeast of downtown, at 3051 Exon Ave., Evendale. The new building, just completed, will serve as a training school, a warehouse, a manufacturing plant, and a distribution center for all Clayton products. Clayton distributor and customer personnel will be trained at the school. The warehouse will be one of Clayton's main supply centers for eastern and midwestern distributors.

The J. B. Beaird Co. is the recipient of J. Y. Taylor Co.'s two-millionth Taylor Visible gauge. Cecil Squibb, president of Squibb-Taylor, Inc., Dallas, exclusive Visi-

VIKING LP-GAS PUMPS

3 UNITS IN 4 SIZES

for every fueling and bottle-filling need

The most compact, light weight Viking LP-Gas fueling pump on the market. Includes same sturdy Viking "gear-within-a-gear" construction as larger models. Mounted directly on to flanged 1/2 HP, 3450 RPM motor. Pump includes ball bearing construction and safety by-pass valves.

A sturdy Viking "gear-within-a-gear" pump equipped with mechanical seal, ball bearing and O-ring construction, with safety relief on suction port and safety by-pass valve on pump head. Direct connected to 1/2 HP, 1750 RPM motor . . . and all mounted on formed steel base.

For fastest fueling and bottle filling of LP-Gas, two sizes of Viking "gear-within-a-gear" pumps. Both have similar construction to the 10 GPM model GG 196, shown above. 20-gallon pump is direct connected to 1 HP, 1750 RPM motor and 30-gallon pump to 1 1/2 HP, 1750 RPM motor.

Send for folder SP479 B and Catalog H B today



VIKING PUMP COMPANY

Cedar Falls, Iowa, U.S.A. In Canada, it's "ROTO-KING" pumps

SEE OUR FILE IN BUTANE-PROPANE CATALOG

ble distributors, advised Beaird officials that its Clinton, Iowa, plant would soon be awarded a Golden Visible Gauge commemorating its receipt of the two-millionth gauge. The first Golden Gauge marking Visible's first million is held by the Delta Tank Manufacturing Co.

The Burnham Corp., Irvington, N. Y., has announced a change in the name of its Berger plant in Belle Vernon, Pa. Formerly called the Berger Furnace division, it is now the Burnham Corp. Warm Air & Cooling division. The announcement was made by John J. Hildebidle who recently became general manager of the division.

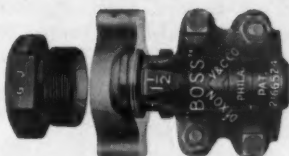
The Ray Co., 4411 Belmont Ave., Dallas, Texas, has acquired a sales agreement with American Air Filter Co., Inc., Louisville, Ky., to market AAF's line of air filter products. This line was formerly represented by Gilbert Engineering Co., Dallas. The Ray Co. is now a sales outlet for all products manufactured by the American Air, Herman Nelson, Kennard and Illinois Engineering division of AAF.

Caloric Appliance Corp.'s Chicago regional sales offices have moved into larger headquarters in Space 11-116-A at the Merchandise Mart. The previous offices were located in the American Furniture Mart. The new offices will house a complete showroom displaying the entire line of Caloric appliances. There will also be a builder room with samples of the Caloric color-coordinated kitchen program.

A. R. Blossman, Inc., Covington, La., has filed articles with the office of the secretary of state in Baton Rouge, La., changing its corporate name to Blossman Hydratane Gas, Inc.

The first plaque ever presented to an L. P. gas distributor by Esso Standard Oil Co. was awarded to Suburban Propane Gas Corp., Whippany, N. Y., "in recognition of 20 years of cordial business relations between these two companies." In making the presentation to Mark Anton, president of Suburban Propane, Maurice B. El-rope, manager of Esso's L. P. gas sales in New Jersey, said his company intends to give recognition to other distributors supplied by Esso for 20 or more years.

***Strongest, Safest
Connections...for
All L-P Hose!***



"G J-BOSS" STYLE X-34 GROUND JOINT FEMALE COUPLINGS

Unequalled in strength, durability and safety! That's why more and more "GJ-Boss" Couplings are being used on hose handling L-P Gas . . . at bulk plants . . . on carloading rigs . . . and other installations. All parts are steel or malleable iron, thoroughly rust-proofed. Furnished with super-strong "Boss" Offset and Interlocking Clamps. Ground-joint union between stem and spud forms leakproof, trouble-free seal. Sizes 1/4" to 6", inclusive. Also available in washer type, and with companion "Boss" Male Couplings. Stocked by Manufacturers and Distributors of Industrial Rubber Products.

DIXON Valve & Coupling Co.

GENERAL OFFICES & FACTORY - PHILADELPHIA 22, PA. BRANCHES - CHICAGO
BIRMINGHAM - LOS ANGELES - HOUSTON - DIXON VALVE & COUPLING CO., LTD., TORONTO
ASSOCIATE COMPANIES: RUCK IRON COMPANY, INC. QUARRYVILLE, PA. - PRECISION DRAWN STEEL COMPANY, CAMDEN, N.J.

GENERAL L-P GAS TANKS

20 lb.—40 lb.—60 lb.—100 lb. Cylinders

Complete Line of Accessories for Single or Double Hook-ups . . . Regulators—Valves—Racks—etc. Everything that is needed for complete Bottle Gas Installation.

★ Send for full details today.

General Processing Corporation
Main Office and Factory: Quincy, Michigan

West Coast Division:
10854 E. Central Ave., El Monte, California



BPN

ASSOCIATIONS

Pennsylvania firemen see live fire demonstrations

Representatives of 60 eastern Pennsylvania fire companies and representatives of the Pennsylvania State Police Fire Marshal's office attended a live fire demonstration of L. P. gas and L. P. gas equipment recently in Allentown, Pa.

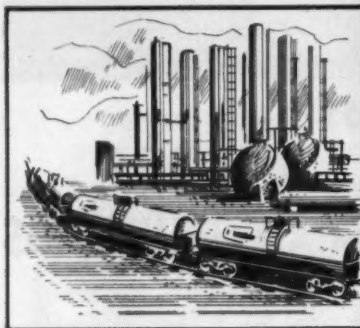
The demonstration was sponsored by the Cetronia Volunteer Fire Co. and the Pennsylvania LPGA Safety & Educational committees. These two groups were assisted by representatives of area association members, the Bastian-Blessing Co., and a local fire extinguisher distributor.

Paul Haines, vice president of Pennsylvania LPGA, served as the

coordinator. Basic facts about L. P. gas and a demonstration of the types of extinguishers suited to L. P. gas fires were presented to the group at a pre-live demonstration session; after which, the group adjourned to an adjacent open area to witness live demonstrations of the behavior of L. P. gas and equipment under simulated fire conditions.

The theme of the entire presentation to this group of city and volunteer firemen was, "don't put it out—turn it out."—emphasizing the fact that an LPG fire should never be extinguished and the vapors permitted to continue their escape.

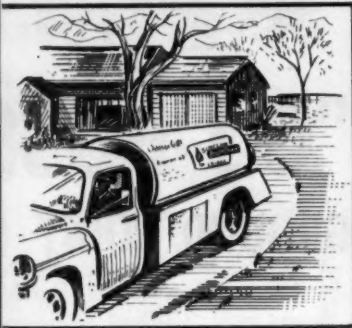
Each of the firemen attending was afforded the opportunity of obtaining supervised training in the proper method of handling a live L. P. gas fire. Also, each fireman had an opportunity to examine and familiarize himself with a bulk truck and its features.



**When You RECEIVE
Good Service . . .**

The closest cooperation between producer and marketer is important if the consumer is to receive the right kind of service. And Sinclair has a determined desire to give you the cooperation you need to serve your customers better.

You'll receive the kind of dependable service you want when you have a Sinclair TRUFLAME contract. Write or call for information today.



**You can GIVE
Good Service**

An EXTRA Sinclair service is the TRUFLAME 50/50 Advertising Program, available to all Sinclair TRUFLAME distributors. Get twice the advertising at half the cost with this practical sales plan.



**SINCLAIR
OIL & GAS COMPANY**

LIQUEFIED PETROLEUM GAS SALES DEPARTMENT
SINCLAIR OIL BUILDING — TULSA 2, OKLAHOMA

Telephone LUther 4-0411

Maryland venting school held by Wm. Wallace Co.

A gas venting service school conducted by the William Wallace Co. for the Maryland LPGA drew a total of 40 representatives from Maryland L. P. gas companies.

Art Allen, Hagerstown Gas Co., Hagerstown, Md.; Ernest G. Johnson, Charles D. Johnson & Son, Bel Air, Md.; and E. J. Stevens, Trueman Gas Co., Annapolis, Md., made up the committee that handled the school.

The school was run on three consecutive days at three different locations—Hagerstown, Md., Aberdeen, Md. and Annapolis, Md.

The service school covered improper venting of gas fired appliances, and a discussion of vent design tables.

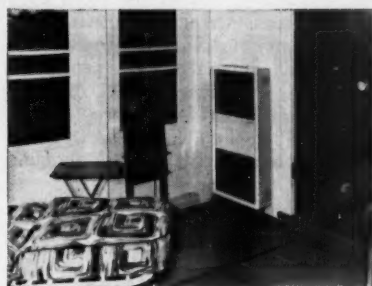
Two companies adopt Handy Flame character

The Texas Gas Distributing Systems, Del Rio, Texas; and Intermountain Gas Co., Boise, Idaho, have adopted the copyrighted advertising character Handy Flame as their friendly spokesman.

This brings to 72 the number of gas companies and gas associations in the U. S. and Canada that use Handy Flame.

Character is not made in a crisis—that's when we find out whether we have it.

A fair idea put to use is better than a good idea put in the files.



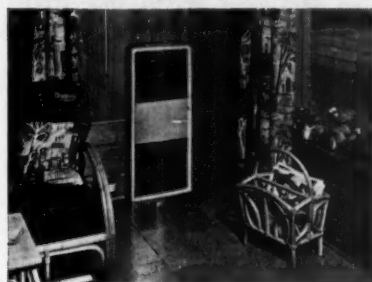
... for added rooms and enclosed porches



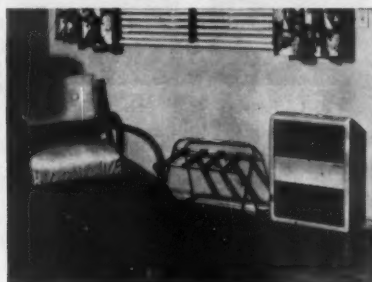
... for workshops



... for offices



... for hard to heat rooms



... for motels



... for bathrooms

THE **PROFITABLE** SOLUTION TO DOZENS OF HEATING PROBLEMS

SAF-AIRE

SAFETY-SEALED

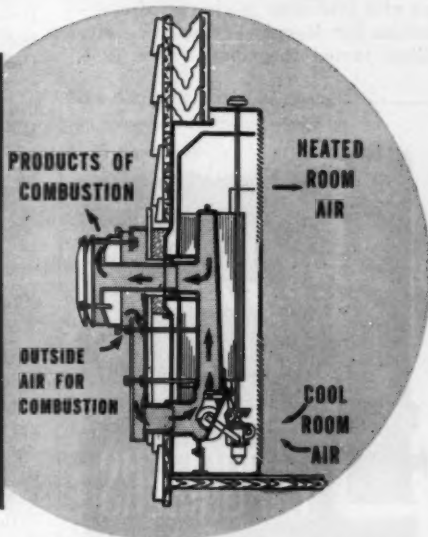
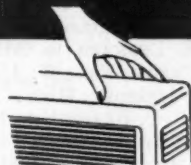
AUTOMATIC GAS HEATING

Dealers handling Stewart-Warner Saf-Aire Heaters never run out of money-making opportunities! Saf-Aire units can be installed so easily...with such complete safety...in so many places...and with such customer satisfaction, that they represent a substantial source of profits.

The diagram shows the "Safety-Sealed" design of Saf-Aire Gas Heaters. Gas is burned in a ceramic lined steel chamber completely sealed from the room air being heated. Sealed vents through the wall supply outside air for combustion and discharge products of combustion directly outdoors. No stuffy, suffocating rooms.

Saf-Aire is safe under all conditions of use...approved for bedroom installation. Its many exclusive features have been tested and proved in over 12 years operation in the field.

Write today for information on how to obtain a Saf-Aire dealership.



EXTENDS ONLY 5 1/4" INTO ROOM
Saf-Aire is really a space-saver—slim, trim and handsomely finished in a neutral color.



HEATING AND AIR CONDITIONING
DIVISION
STEWART-WARNER
CORPORATION

DEPT. AT-29, LEBANON, INDIANA

JOHN L. TULLIS has been elevated to president and general manager of the **J. B. Beaird Co., Inc.** Mr. Tullis, who has been executive vice president, succeeds **J. PAT BEAIRD**, son of the company's founder and president since 1939, who announced his resignation in order to devote full time to outside interests. Mr. Beaird will remain as a director. Mr. Tullis will also head Beaird International, Inc. and the Phoenix Corp. He entered the company in 1947 as general manager of sales and was advanced to vice president of sales in 1954. In July 1957 he was appointed executive vice president of the company and a member of its board of directors.

HOWARD J. GOSS will be vice president in charge of sales and **JOHN F. ROGGENKAMP** will serve as vice president in charge of operations for **Harper-Wyman Co.** Mr. Goss joined the company in 1938



J. L. Tullis
J. B. Beaird



H. J. Goss
Harper-Wyman

as a design engineer, became a sales engineer in 1940 and sales manager in 1956. Mr. Roggenkamp started as a tool and die maker in 1935, was made a supervising foreman in 1937, plant superintendent in 1939 and became Chicago plant manager in 1954.

JOHN C. C. BYRNE has been elected vice president, finance, of **Robertshaw-Fulton Controls Co.** by the board of directors. **MILTON E. CASE** was elected to succeed Mr. Byrne as controller. Mr. Case has been assistant controller. Mr. Byrne was named controller in 1957. For the previous 12 years, he had been assistant controller of the company's **Grayson Controls** division. Mr. Case joined the firm in 1954 as chief internal auditor, and was made assistant controller in 1957.

Decentralization of its sales staff by locating a number of its field representatives in their territories to provide more efficient service for their customers has been completed by the **L. P. gas** division of **Warren Petroleum Corp.** The reassignments include: **WILLIAM J. LEONARD** to Atlanta, Ga., from Tampa, Fla.; **W. J. CONNELLY** to Jackson, Mich., from Louisville; **S. P. BEARDEN** to Nashville, Tenn., from Denver, Colo.; **DON W. CAMPION** to North Haven, Conn., from San Francisco; **WILLIAM E. MEEKS** to Jackson, Miss., from Tulsa; **R. C. BREWER** to Montgomery, Ala., from Tulsa; **BILL TIPTON** to Midland, Texas, from Tulsa; **DAVE ROBINSON** to Garden City, Kansas, from Omaha, Neb.; **JOHN W. ALLRED** to Spicer, Minn., from Madison, Wisc.; **BILL J. GULLEDGE** to Los Angeles from San Francisco, and **C. T. BIRCH** to Fond du Lac, Wisc., from Mid-

land, Texas. **CHARLES LOFTIN** has been transferred from Dallas to Tulsa headquarters as products application engineer. **W. D. MANAHAN** has been transferred from the products application section to field representative for Oklahoma.

JAMES H. GEORGE is appointed factory representative for **H. C. Little Burner Co., Inc.**, to cover Pennsylvania and parts of New Jersey and New York. Mr. George has previously served this territory as representative for **Philadelphia Electric Co.**, **Westinghouse** and **Admiral Corp.**

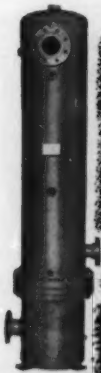
Five appointments have been made to the Dallas based **Trinity Steel Co.'s** sales engineering staff. Among those joining the staff are **JAMES F. SCOTT**, southwestern sales manager; **CHARLES P. MARTINDALE**, sales engineer, Louisiana, Arkansas and East Texas territory; **CLINTON C. SHIPMAN**, sales engineer, Austin, Texas; **EDWARD E. MANCE**, Kansas territory, and **ROY L. FURNISH**, sales engineer, Oklahoma area. All the men have taken a training course.

JOHN D. BAKER, JR., senior partner, **Reynolds & Co.**, has been elected to the board of directors of **Robertshaw-Fulton Controls Co.** He replaces **THOMAS F. STALEY**, a **Robertshaw-Fulton** board member since 1947, who resigned due to pressure of business commitments elsewhere.

JOHN L. DERBY has been appointed executive vice president of **Scaife Co.** In his new post, Mr. Derby will administer the sales, engineering and production activities of **Scaife**. He was formerly with **Hanlon & Wilson Co.** and the **J. A. Zurn Manufacturing Co.** Previous to this he was with the **Blaw-Knox Co.** for 17 years.

ARNOLD C. HANSEN has been promoted to assistant to the general manager of the **Grayson Controls** division, **Robertshaw-Fulton Controls Co.** In addition to his duties assigned by the general manager, he will continue to represent the **Grayson** division in connection with the company's national service program. He joined the company in 1946.

ALLISTAIR DUNN has been named to head manufacturing operations for the **Ohio Injector Co.**, as director of manufacturing, under a newly aligned production organiza-



PARACOIL

LP-GAS VAPORIZERS

Specified by Consulting Engineers throughout industry. Units are applicable to ammonia vaporization as well.

WRITE FOR BULLETIN 130

DAVIS ENGINEERING CORPORATION
30 Rockefeller Plaza, N. Y. 20, N. Y.
Circle 6-5650
1064 East Grand St., Elizabeth 4, N. J.
Elizabeth 2-6780

REPRINTS

from BUTANE-PROPANE

... to help you sell— **News**
to guide your staff—

These important articles from past issues of BUTANE-PROPANE News are available as reprints, while they last, at the prices indicated. Quantity discounts (same reprint) 10 to 49 copies, 20%; 50 copies and up, 30%.

(Check should accompany order)
(In California add 4% sales tax)

Agricultural

- Agricultural flaming (March, '56) 16 pages 25¢
Whirlwind in a feather factory (Nov., '55) 4 pages 10¢
Propane cuts cost of weed control on railway rights-of-way (March, '56) 2 pages 10¢
How to slice yourself a share of the Stock Tank Heater market (Nov., '57) 2 pages 10¢

Industrial

- New savings in propane torch metal cutting (July, '57) 2 pages 10¢
Plumbers' furnaces provide hot market (April, '56) 6 pages 15¢

Power

- Full report on Chicago's 1050 propane buses (July, '56) 8 pages 20¢
LPG preools California crops (March, '56) 4 pages 10¢
Small bus fleet articles (San Antonio and Wichita) (Aug. & Sept., '56) 6 pages 15¢
His "Carburetion Fingers" pay off (March, '56) 2 pages 10¢
My same-sized crew services twice the fleet since conversion to LPG (Sept., '57) 2 pages 10¢
Have a Coke, courtesy of LPG (Nov., '57) 4 pages 10¢
Illinois taxicab fleet saves \$60 per month per cab with LPG (March, '58) 2 pages 10¢

Heating

- Selling LPG heating beyond the mains — the story of Cookgas (Nov., '55) 4 pages 10¢
Degree day counter saves the day (June, '56) 2 pages 10¢
We can have schools for less money, with gas heat (Dec., '55) 4 pages 10¢

General

- Gas is the Safest Fuel— NFPA fire loss report (Jan., '56) 4 pages 20¢
The house trailer problem is nearer solution (July, '57) 6 pages 15¢
Trial by fire (March, '57) 2 pages 10¢
Look for new highs in LPG sales in '56 (Jan., '56) 4 pages 10¢
The sale isn't made until the cash is collected (Jan., '58) 4 pages 10¢
Open letter to the President— Wipe out the REA (Feb. & March, '58) 8 pages 15¢

BUTANE-PROPANE News

198 S. Alvarado St.

Los Angeles 57, Calif.

presenting ...



Proudest performers of all time, Enterprise Ranges of our Centennial Line are designed and manufactured with one hundred years of scientific know-how and dependability behind them.

To celebrate our 100th anniversary, we have gone all out to build the finest ranges of all time.

Get *Enterprise* for Profit. *Generous floor plan.
No down payment. *Generous advertising allowance.
Free mat books.



PHILLIPS & BUTTORFF CORPORATION

Nashville, Tennessee

100 Enterprising Years



MR. DEALER YOU'RE MISSING SALES

IF YOU
DON'T
SELL



SUBURBAN NOVENT and DYNAVENT GAS HEATERS

Only these unique heaters offer a combination of features that solves so many heating problems . . .

- Install in window or outside wall
- Take up no floor space
- Completely vented without flue or chimney
- Safe—burn no room air
- Automatic with built-in or wall thermostat
- Forced warm-air circulation
- Even heat from floor to ceiling

SAVE UP TO 30% IN FUEL COSTS

Available in three sizes—
20,000 BTU—35,000 BTU—45,000 BTU

Fully approved by AGA, Leading
Utilities and LP-Gas Marketers

For complete details write to
Dept. 8P-259

SUBURBAN APPLIANCE CO.

GENERAL OFFICES — WHIPPANY, N. J.
FACTORY — DAYTON, TENN.

tion grouping. He comes from Blackhawk Manufacturing Co., Milwaukee, where he held a similar post. In another move, VERLAND W. BELT, plant superintendent of facilities, Wadsworth, Ohio, was named manager of the Ohio Products Co., Orrville, a subsidiary. Mr. Dunn announced that the manufacturing organization is being broadened to regroup management functions to include separately directed manufacturing and industrial engineering. To the newly created posts he named JOHN T. LESKO and MALCOLM K. SHEPPARD JR.

EDWARD N. WRENSHALL has been appointed to the newly established office of general manager for Kerotest Manufacturing Co. He will direct and coordinate all activities of both the steel and brass divisions.



E. N. Wrenshall
Kerotest



Miss Edith Ballou
Sprague Meter



James Scott
Setco Adv.



B. T. Kehoe
Carrier Corp.

MISS EDITH BALLOU has retired from the Sprague Meter Co. after 50 years of service. She started with the company in 1909, later became sales manager, and then in 1939 had the distinction of being the first woman in industry to serve as a general sales manager. She served also in the capacity of secretary of the company and has been a member of the directorate for the past 16 years. THOMAS J. WATT has been named secretary to succeed Miss Ballou. He has been associated with the company since 1929 serving in numerous capacities in production, engineering, service, sales and as advertising manager. Mr. Watt will continue as eastern regional manager.

Controls Co. of America recently announced four major promotions. PHIL BAIN has been promoted to product line manager, industrial and commercial controls sales. H. R. CHAPIN was named chief product engineer, appliance and automotive controls. J. J. KALEBA was appointed engineering supervisor of the switch group. MARSHALL ZUGEHR was promoted

sales coordinator, international division activities. In addition, he will serve as coordinator for automotive sales.

UDELL WESTMORELAND has been appointed as the regional Empire Stove Co. sales representative for Tennessee, Arkansas, northern Louisiana, and northern Mississippi. Mr. Westmoreland has had nine years experience selling heating appliances for the Belleville, Ill., based firm.

JAMES SCOTT will do copy writing, public relations, research-survey work and other duties for the Setco Advertising Co., an affiliate of the Sales Engineering & Training Co. He has had more than 12 years' experience in the newspaper-advertising-public relations field.

BURTON T. KEHOE has been named sales manager of packaged air conditioning equipment for the Unitary Equipment division of Carrier Corp. He joined the company in 1948 as general attorney. He has served as executive assistant to the president, and as manager of the residential department of the Unitary Equipment division. He was assistant to the general manager.

ROBERT L. GRINDLAY has been appointed western sales representative for the Betts Machine Co. At present he is in the field, demonstrating and consulting with users, manufacturers, and jobbers who have need of Betts' equipment.

WATT H. MCBRAYER has been named manager of industrial relations for Cities Service Oil Co. He succeeds FRED M. BUTLER, who has been transferred to the New York offices of the parent Cities Service Co. as assistant manager of industrial relations. Mr. Butler has been engaged in industrial relations work for the company since 1926. He was appointed manager of industrial relations for

the company in 1941. Mr. McBrayer joined Cities Service in 1950 as a member of the legal division, assigned to industrial relations work.

W. L. GRUNEISEN is now a sales engineer with B. R. Jones & Co., Fisher Governor Co. sales representative in southern California. For eight years he was associated with the Instrument & Standards departments at Anderson, Clayton & Co., and was project engineer for two years with C. F. Braun Co.

L. J. MONAHAN, W. R. EGAN and K. G. HULL have been appointed regional sales managers, Janitrol Heating & Air Conditioning division, Surface Combustion Corp. Mr. Monahan, who lives in Columbus, will handle the central region, consisting of the Buffalo, Cleveland, Pittsburgh, Detroit, Indianapolis, Cincinnati, Louisville and Columbus districts. Mr. Egan, of Denver, will handle the western region, consisting of the Denver, Kansas City, Omaha, Oklahoma City and Lubbock districts. Mr. Hull, of New York City, will handle the eastern region, including New York, Boston, Springfield, Mass., Philadelphia, Washington and Richmond districts. All other districts will continue to be handled by headquarters in Columbus.

FLOYD H. FOSTER has been appointed service training instructor for the southwest area by Robertshaw-Fulton Controls Co. Mr. Foster will travel through the area with a mobile training school, demonstrating the workings of new types of controls for home units. The training school will be available to representatives of L. P. gas groups.

WILLIAM H. WHITE has been appointed district sales manager for the Fulton Sylphon division, Robertshaw-Fulton Controls Co. His territory covers the upper half of New York State and northern counties of Pennsylvania. He joined Robertshaw in 1956 as sales engineer in the Syracuse, N. Y., territory.

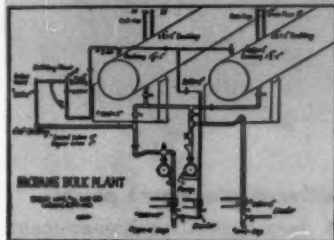
JOHN J. HILDEBIDE has been made general manager of the Berger Furnace division of the Burnham Corp. He was formerly associated with the Mathes Co., Fort Worth, Texas, and with the International Heater Co., Utica, N. Y.

Your One Supplier with everything in L. P. gas and Anhydrous Ammonia Equipment



"The Loadmaster" LPG Truck Tank

PASLEY-DESIGNED Truck Tanks (see above and right) were first to feature all controls from one location. All operation is from one point—rear compartment.



BULK PLANTS Pasley LPG and Ammonia type installations—a turnkey job or engineering for your own installation. Write, wire or call.

Also a complete line of accessory equipment.

"Pastels By Pasley"

COLOR—The Modern Trend! Bring your LPG Equipment up to date. Available in the following colors . . . (write for information)

Blush Peach
Sunshine Yellow
Mustard Lime
Eureka Orchid
Lake Blue

Smoky Grey
Seafoam Blue
Wedgewood Green
Rose Beige
Desert Rose



EVERYTHING IN LPG AND ANHYDROUS AMMONIA

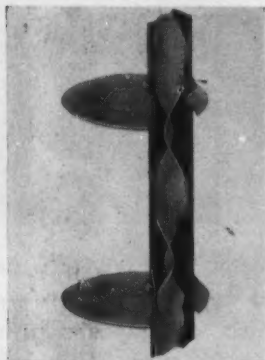
The Pasley Mfg. & Dist. Co.

201 East 11th Street • Kansas City, Mo. • Tel. MAJOR 2-2100

WHAT'S NEW

IN PRODUCTS AND TRADE LITERATURE

For further information on items reviewed in this section use the convenient post-paid Readers' Service Cards on pages 73, 74



Equalized tank temperatures

Excessive temperature build-up in water heater tanks, called "stacking" in the trade, has been reduced by 66 $\frac{2}{3}$ per cent with the introduction of Hydro-Vanes, a feature developed by H. C. Little Burner. A series of fins within the tank itself are engineered to direct the flow of water so as to almost equalize temperatures throughout the tank. AGA has approved H. C. Little water heaters with Hydro-Vane control for thermostat setting up to 180 deg.

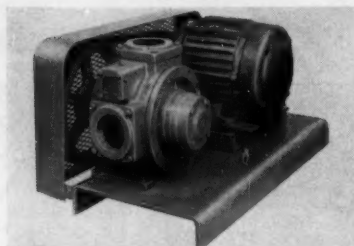
Circle 1 on Readers' Service Card

Plastic lead seal

A plastic lead sealing compound for use on pipe joints, plugs, screwed fittings, flanges and gaskets is available from Crane Packing. According to the company, the compound prevents seizing and galling, protects against rust and corrosion, never hardens, won't crack due to temperature

changes, never washes out, is insoluble in gas, oil, steam, chemicals, petroleum products, and withstands pressures up to 6000 psi, temperatures to 550 deg. F.

Circle 2 on Readers' Service Card



Positive-displacement pump

A larger positive-displacement pump has been added to Corken's series. It is designed for stationary use where large volumes of non-lubricating fluids such as LPG and NH₃ are to be transferred. Sliding vanes, which are activated by hydraulic pressure, through directional channels machined in the side plates, eliminate the need of springs or drive pins for this duty. For LPG, the vanes in the pump are of plastic.

Circle 3 on Readers' Service Card

Jet counter griddle

Frymaster offers a jet counter griddle with a 1 deg. thermostatic action. Rated at 90,000 Btu input, it is manufactured in the 18 x 36 in. size. Controls are recessed for ease of cleaning.

Circle 4 on Readers' Service Card



"Square look" range line

Phillips & Buttorff's 100th anniversary range features the "square look" background. It is trimmed in black and ocean gray. Grates, control knobs, toe plates and interiors are ocean gray enamel. One model has automatic ignition, Perfectrol top burner, slide-across grates, illuminated picture window oven, modernistic die cast Telechron clock and timer with lamps, and a convo-griddle that converts to a fifth burner when needed. There are 34 models in the complete line.

Circle 5 on Readers' Service Card

One-man trencher

Arps Corp. announces the development of a one-man operated trencher. It may be transported for short distances under its own power at 2 $\frac{3}{4}$ miles per hour. For long distance moving, it can be easily skid-loaded on pickup trucks or small trailers. There are five

FOR MORE INFORMATION

about New Products
in this Issue

Each New Product or Trade Literature item reviewed in this issue is numbered. Circle the corresponding numbers on the Readers' Service Card; then PRINT your name, title, company and address plainly and drop the card in the mails (no postage is needed).

BUTANE-PROPANE *News* READERS' SERVICE DEPARTMENT

Please send me further information
about the items circled below

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

• Please Print

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

CITY & STATE _____

February, 1959 • Void after 90 days

BUTANE-PROPANE *News* READERS' SERVICE DEPARTMENT

Please send me further information
about the items circled below

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

• Please Print

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

CITY & STATE _____

February, 1959 • Void after 90 days

USE THESE
POSTAGE FREE
POST CARDS

Circle the
number of the
item requested

FIRST CLASS
PERMIT NO. 36
New York, N. Y.

BUSINESS REPLY CARD
No postage necessary if mailed in the United States

POSTAGE WILL BE PAID BY

BUTANE-PROPANE
News Readers' Service Dept.

P. O. BOX 106

VILLAGE STATION
NEW YORK 14, N. Y.

FIRST CLASS
PERMIT NO. 36
New York, N. Y.

BUSINESS REPLY CARD
No postage necessary if mailed in the United States

POSTAGE WILL BE PAID BY

BUTANE-PROPANE
News
Readers' Service Dept.

P. O. BOX 106

VILLAGE STATION

NEW YORK 14, N. Y.

FOR MORE INFORMATION

about New Products in this Issue

Each New Product or Trade Literature item reviewed in this issue is numbered. Circle the corresponding numbers on the Readers' Service Card; then PRINT your name, title, company and address plainly and drop the card in the mails (no postage is needed).

FIRST CLASS
PERMIT NO. 36
New York, N. Y.

BUSINESS REPLY CARD
No postage necessary if mailed in the United States

POSTAGE WILL BE PAID BY

BUTANE-PROPANE
News
Readers' Service Dept.

P. O. BOX 106

VILLAGE STATION

NEW YORK 14, N. Y.

BUTANE-PROPANE
News

READERS' SERVICE DEPARTMENT

Please send me further information
about the items circled below

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

• Please Print

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

CITY & STATE _____

February, 1959

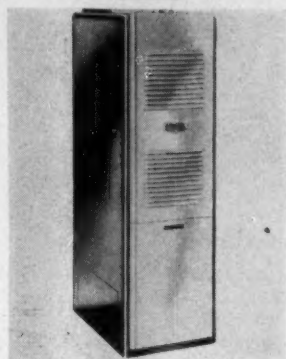
• Void after 90 days

USE THESE
POSTAGE FREE
POST CARDS

Circle the
number of the
item requested

digging widths—2¾, 3½, 4, 6, and 8 in., up to 54 in. deep. Digging speed is variable from 0 to 1200 ft per hour in either direction.

Circle 6 on Readers' Service Card



Furnace line

A series of gas-fired forced air furnaces especially designed for installation in residential utility areas has been introduced by Lennox. They are engineered for optional addition of central air conditioning and may be installed in such locations as utility rooms, closets, home workshop or laundry areas, and attached garages.

An inner liner assures proper air flow during combustion and keeps the outer cabinet cool. They range in height from 58 to 70 in.; in width, from 16 to 36 in.; and are 27½ in. deep.

Circle 7 on Readers' Service Card

Pipe taping machine

A power-driven pipe taping machine, capable of cleaning, priming, taping and overwrapping small distribution pipe automatically, has been announced by Minnesota Mining. Accommodating pipe sizes up to 2 in. in diameter, the machine automatically performs the four operations on more than 2500 ft of pipe per hour, the company said. It is powered by a 9-hp Briggs & Stratton engine.

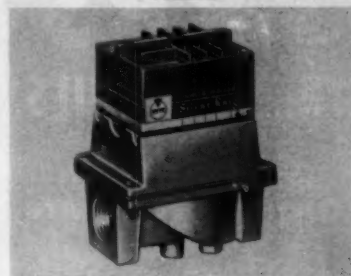
Circle 8 on Readers' Service Card

Multi-jet mixer

Drake & Townsend now has available a packaged "multi-jet mixer" designed for L. P. gas plants with a varying load. It is designed to give more critical control and uniformity of Btu send-out, and more flexible low-load operations not possible in single jet

units. Operates manually or automatically. It is suitable for standby, peak shaving or 100 per cent service applications in small or medium sized plants.

Circle 9 on Readers' Service Card



Quiet gas valve

White-Rodgers' "Silent Knight" gas valve is designed to be used with all types of domestic heating. Unlike the diaphragm valve, it needs no bleed tubing. But, unlike the solenoid, it is said to be entirely noiseless in operation. The entire operating mechanism is contained in a sealed compartment filled with a heavy-duty silicone oil. The oil maintains a constant viscosity no matter how much usage or how high the sur-

ALL NEW FOR '59 ... Featuramic

BROWN
GAS RANGES

New **QUICKER SELLING FEATURES!**
New **PROFITS!**
New **MONEY FOR YOU!**



BROWN STOVE WORKS, INC.
CLEVELAND, TENNESSEE

**Dig Ditches at
Lowest Cost**

ARPS TRENCH DEVILS

**Cost Less to
Own and Operate**



**Model
JR**

- ★ **Versatile** — Digs 2 3/4" wide trench up to 20" deep
- ★ **Fast** — Ditches 6' per minute at 20" depth
- ★ **Simple** — One-man operation
- ★ **Portable** — Easily loaded on pickup

You can eliminate the slow, costly, hand labor of digging L.P. Gas lines with the new, low cost Arps Model JR Trench Devil. This handy tool increases production while cutting operating expenses — digs 100' of trench for about 12 cents! The simple mechanism keeps maintenance costs low — lightweight, rugged construction assures years of profitable use. Unique curb attachment available for easy digging inside a concrete curb.

For larger jobs the self-propelled Model M Trench Devil digs trenches 2 3/4", 3 1/2", 4", 6" or 8" wide, up to 6' deep. Has smooth, hydraulic drive for speeds up to 1200' per hour.

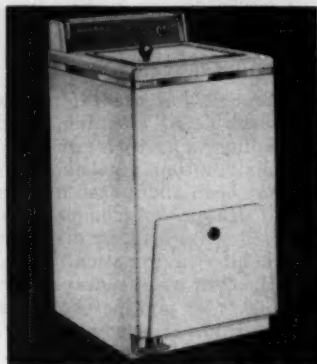
Send for more information today on these two new, low cost trenchers from the Arps Corporation, New Holstein, Wis., Dept. BPN.

ARPS CORPORATION
NEW HOLSTEIN, WISCONSIN

**TRENCHERS
HALF-TRACKS
BULLDOZERS
UTILITY BLADES**

rounding temperatures. It can be installed in any position up to 90 deg. from vertical and is available in low or line voltage models.

Circle 10 on Readers' Service Card



Incinerator—no smoke, odor

Geo. D. Roper recently introduced two smokeless, odorless gas incinerators. Smoke and odor particles are trapped and re-circulated through a "turbo-chamber" where they are consumed by intense heat and flame. The only product of combustion is a fine ash, useful as a fertilizer. Each model features an automatic timer control which shuts off the 30,000 Btu burner when charge is consumed.

Circle 11 on Readers' Service Card



Tube piercing valve

Madden Brass has introduced a tube piercing valve for piercing 1/2 and 5/8 in. od tubing. One valve pierces both tube sizes. It is designed to simplify use by servicemen, in that it can be installed in any position without use of special tools or openers. Because of its 2-piece construction, lost parts are eliminated; V-block and nut are combined in a single unit. It can be installed in any position on lines under pressure without the use of special tools.

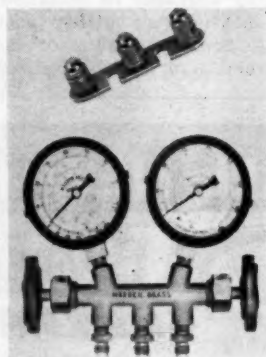
Circle 12 on Readers' Service Card



Chain vise

A top-screw chain vise is announced by the Ridge Tool Co. Said to eliminate knuckle busting and speed all pipe work, it features a large chain tightening handle right up on top of vise base where it is extra handy for fast operation. Handle and tightening nut are anchored to base. Weighing 42 1/2 lb it has a capacity of 1/8 to 5 in.

Circle 13 on Readers' Service Card



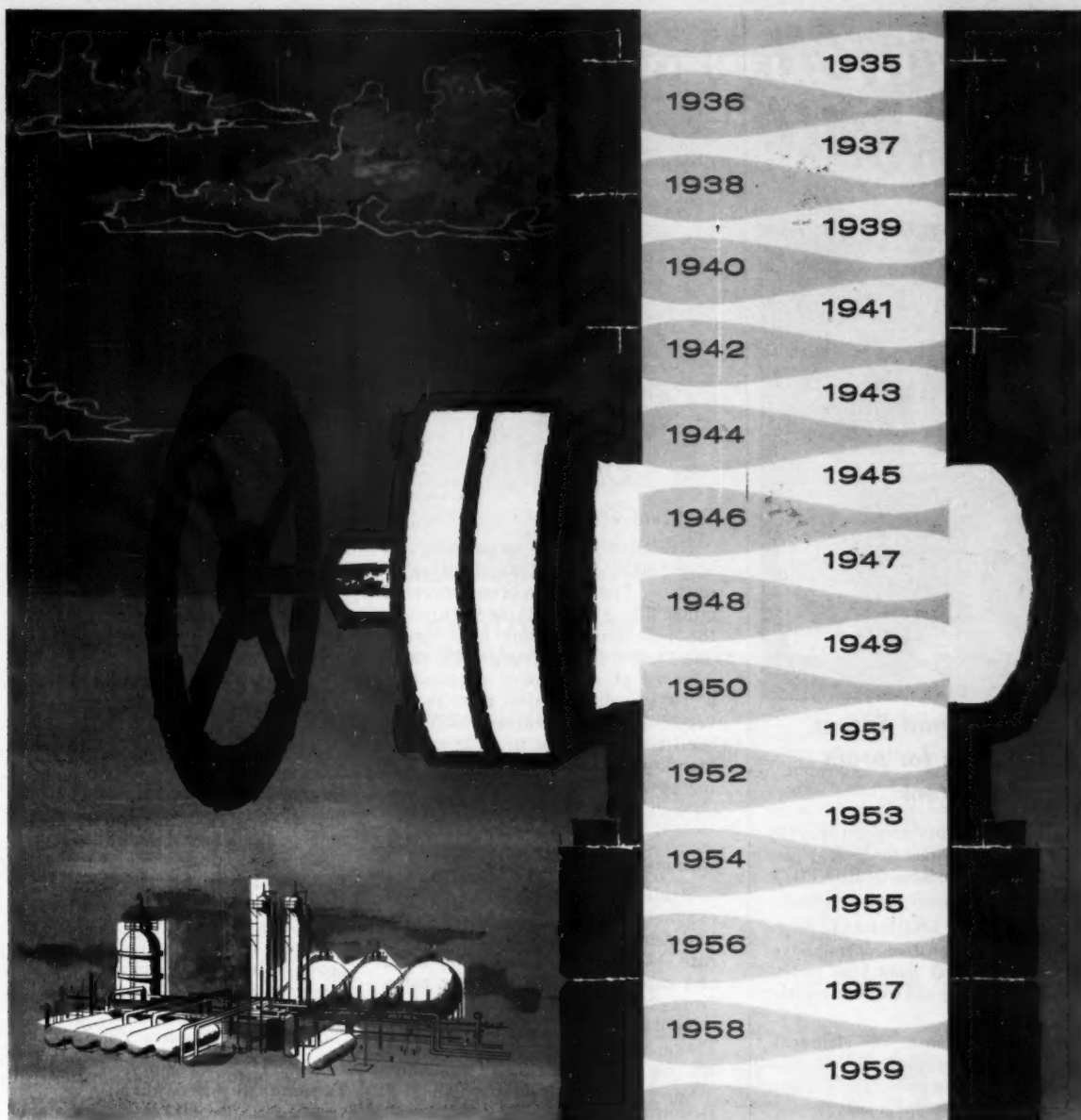
Charging and testing unit

A double gauge charging and testing unit is announced by Madden Brass. It features an all-brass forged body, easy-grip handles and Teflon seat for positive shut-off without stress and strain. Seat is replaceable. Also available is the "handy hose holder" which may be attached to back of unit so hoses or charging lines can be hooked on when not in use. A hanging hook that enables unit to be hung nearby is another piece of optional equipment.

Circle 14 on Readers' Service Card

Automobile manifold tanks

Manchester Tank & Equipment Co. announces the availability of the "Custom-Line" manifold tanks for 1959 model automobiles. The tank provides for maximum LPG



Year after year after year...

Over 20% of Shell's LP Gas Distributors have been constant contract customers for Shell Propane—for ten to 25 years without interruption.

Through the years, Shell has maintained a 100% delivery record to all its propane customers. This achievement stems from one important policy:

Shell contracts to sell propane only within its capacity to produce.

Let a Shell Representative show you why it pays to be a Shell Propane contract customer.



SHELL OIL COMPANY



Albany • Atlanta • Baltimore • Boston • Chicago • Cleveland • Detroit • Indianapolis • Los Angeles
Minneapolis • New Orleans • New York • Portland, Oregon • Sacramento • St. Louis • San Francisco • Seattle

OPERATION SNOWBALL



— a Winter and Spring promotion for profit by Safti-Vent

Safti-Vent, the hottest-profit brand in the already hot market for "sealed" gas wall heaters, introduces OPERATION SNOWBALL.

OPERATION SNOWBALL, Safti-Vent's Spring promotion, offers you a "package" that will build your profits almost automatically and we mean exactly that!

Safti-Vent can make this statement with confidence, because Safti-Vent, and only Safti-Vent has a proved profit record of 7 years of phenomenal growth.

Your Safti-Vent distributor will tell you about Operation Snowball. It's one of the most important profit proposals you've ever heard!



Safti-Vent leader in sealed heating

H. C. LITTLE BURNER CO., INC.
101 Woodland Ave., San Rafael, Calif.

Tell us about Operation Snowball.

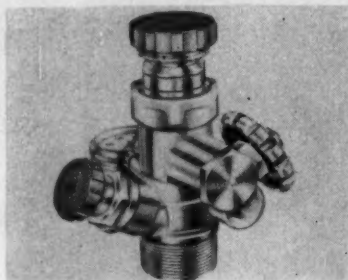
FIRM _____

YOUR NAME _____

ADDRESS _____

capacity, while occupying a minimum of trunk space. A complete listing of tanks for all American automobiles, together with brackets for easy installation, from 1952 to 1959, is available free of charge upon request.

Circle 15 on Readers' Service Card



Multivalve units

Bastian-Blessing announces its Rego 8593 and 8594 multivalve units. The assemblies provide quick filling of containers through the redesigned double back check filler valve. Flow through the units is rated at 48 gpm of propane at a 10 psi drop. Also new is the vapor equalizing valve which has been redesigned to provide a closing flow rate proportionate to the increased filling rate.

Circle 16 on Readers' Service Card

Commercial incinerator

Brulé has expanded its line of commercial L. P. gas incinerators to seven styles. The units incorporate 150,000 Btu blower burners, and capacities cover burning rates from 25-100 lb per hour, volume capacities from 2 3/4 bu to 10 bu. Three new models now available are the M-7 1/2 Barreiful Consumer, 6 bu, 60-75 lb per hour; The M-9 Drumful Consumer, 7 1/2 bu, 70-80 lb per hour; and the M-5 Utility Consumer, 10 bu, 60-80 lb per hour.

Circle 17 on Readers' Service Card

Microfilming technique

Repeated color "step-tests" have been eliminated in the transportable film-a-record model 8.1 microfilm camera by Remington Rand. With the introduction of a built-in volt meter on the transportable model, all guess-work is removed when working with different colored documents. A color "step-test" strip of film will be supplied with each camera noting the proper settings for colored documents.

Circle 18 on Readers' Service Card

All-weather patching material

An all-weather outdoor patching material for chuck-holes, cracks and ruts in black-top, concrete, brick, stone, and cinders, has been developed by the Monroe Co. It sets immediately. No prime coat is necessary. "Zor-X" comes ready to use.

Circle 19 on Readers' Service Card

Plastic clearance lamp

Warren Manufacturing Co. announces its all plastic clearance lamp. Known as the Starline Model D-5, it is sealed water tight by an internal "O" ring seal of lens to housing. Snap-on lens requires no tools for servicing. A screwdriver or even a coin will pry the lens off. Only 3/4 in. in thickness and 2 1/2 in. high, this lamp mounts flush for non-penetration of van body.

Circle 20 on Readers' Service Card

TRADE LITERATURE

Cities Service business library

Cities Service 1959 business library catalog has been redesigned and revised to meet modern petroleum distributor and dealer needs. Of the 102 items in the edition, 42 per cent are new. Each is described and keyed to an enclosed order card. More than 60 per cent of the items offered are free. Others can be ordered directly from the publisher. Highlighting the new edition is inclusion of a seven-volume "Distributor Management Series." Each item in the series is free.

Circle 21 on Readers' Service Card

Tubemanship brochure

"The Measure of Tubemanship," a brochure by Wolverine Tube, has been published to further acquaint industry with the combination of skills and techniques that are necessary to the manufacture of seamless copper and copper alloy tubing. Features included are the components of tubemanship, complete quality control through the various stages of production, creativity in developing new ideas and products, and related customer service.

Circle 22 on Readers' Service Card

Two-way radio booklet

Prepared in pocket size, a two-way radio equipment booklet has been published by General Electric.

It is designed to give those who are planning communications systems the latest available information on standard models of two-way radio and optional types of equipment which can be provided for individual system flexibility. Included is information on GE's complete line of communications units. Sections of the booklet deal with new communications innovations.

Circle 23 on Readers' Service Card

Cast iron boilers catalog

Peerless Heater Co. has just released an eight page catalog on its high capacity, gas fired cast iron boilers. Engineering and detailed information on the 33 sizes are available for use with natural, manufactured and mixed gases with ratings from 600,000 to 5.4 million Btu per hr input. Front and end view drawings, ratings, dimensions and specifications of each boiler are printed for across-the-board viewing.

Circle 24 on Readers' Service Card

Heating and ventilating data

American Air Filter's bulletin, "Heating and Ventilating Units," gives complete information on coil selection for both steam and hot water. Capacity tables, air resistance charts and rpm and horsepower tables are given. In the back pages is a section on dimensions and standard arrangements. The company's Herman Nelson units are available in 12 sizes with capacities ranging from 600 to 73,000 cfm.

Circle 25 on Readers' Service Card

Propane diluter bulletin

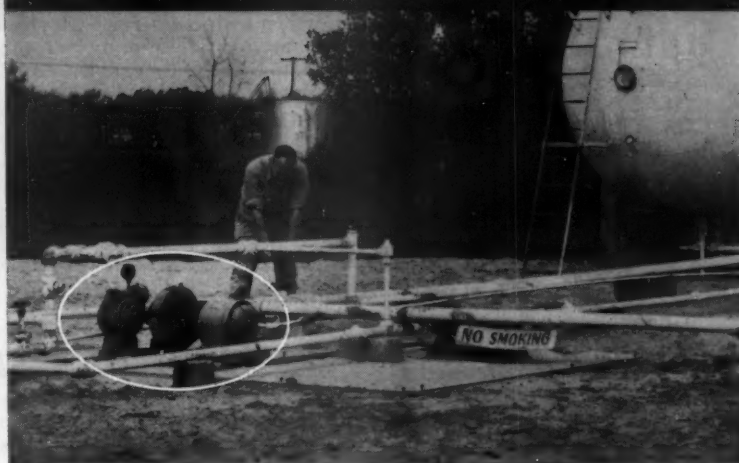
A new bulletin, "Selas Propane Diluter," presents "package units" that accurately mix propane or butane with air to supply standby fuel and maintain heating, heat processing and refrigerating operations, when regular gas supplies are temporarily curtailed. A drawing showing a typical propane diluter installation, details on its automatic operation, and figures on the three pressure ranges available for small, medium and large installations are included.

Circle 26 on Readers' Service Card

Metered service mailing pieces

A folder designed to serve as a sales aid for L. P. gas marketers, describing the advantages that

RUGGED, DEPENDABLE BLACKMER ROTARY PUMPS



- setting new records of performance in bulk plant and truck pump service

The outstanding performance of Blackmer pumps in liquefied gas applications is evidence of the value of Blackmer quality. Meeting the highest standards of design and construction, Blackmer pumps give a bonus of efficiency, trouble-free service and safety.

HEAVY-DUTY ANTI-FRICTION BEARINGS located on both sides of the rotor and completely isolated from the pumpage.

CARTRIDGE-TYPE MECHANICAL SEALS located on both sides of the rotor to control shaft leakage and protect the bearings from pumpage. Easy to replace. Require no adjustment after installation.

SLIDING VANES which are "self-adjusting for wear" to maintain high efficiency over long periods of service.

WRITE FOR BULLETIN 500

Listed by Underwriters' Laboratories, Inc.



"liquid materials handling"® equipment

BLACKMER

BLACKMER PUMP COMPANY, GRAND RAPIDS 9, MICHIGAN

See Yellow pages for your local sales representative

**Keep Up with L. P. gas
Developments Each Month**

**BUTANE-PROPANE
News**

by subscribing to

198 SOUTH ALVARADO STREET, LOS ANGELES 57, CALIFORNIA

☐ Check herewith ☐ Bill me ☐ 1 year \$2.00 ☐ 2 years \$3.00

Name Title

Firm

Street

City Zone State

for leakproof, pressure-tight connections

use
TiteSeal

SEALING COMPOUNDS

Heat and vibration-proof, non-solvent, will not shrink, crack or crumble. Makes all assemblies leak-proof and pressure-tight. Prevents rust, corrosion, joint seizure.



**7 BASIC
BLENDS**

LIQUID WRENCH

The super-penetrating
rust solvent

LOOSENS

rusted bolts, nuts,
screws, "frozen" parts

Liquid Wrench works
fast...yet is absolutely
safe for all metals and
alloys.

2171

At Industrial, Automotive,
Hardware, Plumbing Jobbers

RADIATOR SPECIALTY CO.



PORTRAIT of a PROFIT MAKER



WALDORF standard

L-P Gas Hot Water Heater
A.G.A. APPROVED

Available in round 20, 30, 40,
50, and 75 Gallon Sizes. Also
Table Top models.

For the Waldorf Profit Maker
Story, write to, Dept. 2.



WALDORF
HEATER COMPANY

1421 Chestnut St.
Philadelphia 2, Pa.

metered L. P. gas service provides for homeowners, has just been completed by American Meter. Entitled "You Get 'City-Type' Service in the Country When You Use Metered L. P. gas," the fully illustrated folder details the ways in which metered service provides economy, comfort and convenience to the L. P. gas customer. Dealers may obtain copies of the folder for use as direct mail advertising pieces. Ample space has been left on the back of the folder for the dealer to imprint or stamp name and address.

Circle 27 on Readers' Service Card

Built-in fryers literature

Frymaster built-in deep fat fryers for custom counters are described in a 4-page full color brochure. Complete engineering drawings facilitate architects and building designers. Photographs of installations show units in use. The brochure covers fryers of 15, 35 and 55 lb fat capacities. Each built-in fryer is a full sized, fully insulated, self-contained frying unit.

Circle 28 on Readers' Service Card

Heavy-duty space heaters data

An eight-page bulletin gives complete engineering data on the redesigned line of heavy duty space heaters now in production by the Reznor Manufacturing Co. It also gives complete construction details and specification data on ten models for gas, oil or gas-oil firing ranging in capacity from 400,000 to 2 million Btu per hour output.

Circle 29 on Readers' Service Card

Rotameter information

Schutte & Koerting's line of metal tube rotameters for measuring the rate of flow of hazardous and high pressure fluids at temperatures up to 400 F is described in a new bulletin. It presents simplified, easy-to-use instructions for sizing the rotameters or liquid service. Tables give dimensions, sizes, and capacities. Sectional drawings illustrate the Rotameters and are used to explain operation.

Circle 30 on Readers' Service Card

Marketing hose reference

Three styles of butane-propane hose, plus a butane vapor hose for carburetors are included in Acme-Hamilton's "Oil Marketing Hose

Reference Catalog." This catalog describes and illustrates types of hose used to conduct petroleum products from the refinery to dealers and consumers. A special section, completely illustrated, shows couplings available.

Circle 31 on Readers' Service Card

Panel control systems folder

Available from Iron Fireman is a detailed folder on pre-wired, pre-tested panel control systems for gas or dual-fuel burners in commercial and industrial boiler installations. Included are dimensions, illustrations, special advantages, and selection chart for quick and easy specification of panel assemblies.

Circle 32 on Readers' Service Card

Fire extinguishers bulletin

A technical bulletin on dry chemical fluidization of Ansul "D" model fire extinguishers is available. It explains why fresh-filled extinguishers out-perform units subjected to vibration and packing due to transportation and long storage.

Circle 33 on Readers' Service Card

Firing systems folder

A four-color folder describes Iron Fireman industrial packaged forced-draft firing systems for dual-fuel or single-fuel firing of high or low pressure gas in Scotch marine, steel firebox, water tube or cast iron boilers. Included are illustrations and information on nine installations.

Circle 34 on Readers' Service Card

Frying equipment information

Keating fryer catalogs illustrate the various models of deep fat fryers, blanchettes and accessories manufactured by the company. Three pages are devoted to recipes and 1½ pages are devoted to general information concerning the "causes of fat breakdown" as experienced in restaurants.

Circle 35 on Readers' Service Card

Boiler selection guide

A 20-page guide on "How to Select a Boiler" has just been released by Cleaver-Brooks. The booklet, complete with over 30 illustrations and graphs, is in handy 5 by 7¼ in. format.

Circle 36 on Readers' Service Card



Butane, Propane

POWER

INSTALLATION
CARBURETION • SERVICING

POWER SECTION

INDUSTRIAL PROPANE CORP.

We specialize in forklift fuel

Dick Gerwick (right) of Industrial Propane Corp., Woodbridge, N. J., is building a fast-growing business by concentrating on a rapidly-growing forklift market in industrial New Jersey.



DICK GERWICK is an L.P. gas dealer who has never sold a pound of gas for use in a range, refrigerator, water heater, or space heater. Yet he's one of northern New Jersey's most promising and fastest growing young dealers.

You could hardly beg a bottle of gas from Gerwick if you wanted it for your home. He's too busy serving a rapidly growing power market, about 99 per cent of which is concentrated in forklift trucks.

Gerwick has been literally shooting domestic and commercial customers away from his Industrial Propane Corp. plant in Wood-

bridge. He refers this type of customer to another dealer. He's a specialist in internal combustion uses, and he figures the market is so huge in his territory that to diversify at this point would be foolhardy. The only other types of business he will take are those that can be carried on the coat-tails of the power load, so to speak.

These coat-tail loads, incidentally, are going to become more important all the time. But they will never stand alone so long as the forklift market continues to live up to the faith Gerwick has placed in it. After three years as

a dealer, he is ladling out a million gallons a year, but he doesn't think he has scratched the surface yet. Gerwick believes he has about 5 per cent of the forklift market, and that this is more than all his competitors combined. Conservatively, then, 90 per cent of it would still remain.

Started with forklifts

Gerwick is an unusual type of dealer because of his background and introduction to the industry. The average dealer gets his start serving the more orthodox loads, and if he goes into carburetion, this means he is diversifying. It's

Forklift truck customers are being converted to bulk gas as rapidly as their usage warrants it. This 2000-gal. installation is at Valentine Fire Brick Co.



The largest share of Industrial Propane's customers are still on bottled service. Four cylinders can be filled simultaneously at the Woodbridge plant.

Specially built low-gate trucks are used for cylinder deliveries. Each truck holds between 140 and 150 cylinders. The truck floor is of diamond plate to give secure footing. Easy access is provided by staggered side gates on each side.



the other way around with Dick: he got his start converting forklifts, then decided to start supplying them with fuel. Forklifts are his base load.

A graduate of Stevens Institute of Technology with an engineering degree, he was hired by Suburban Propane Co., Whippany, N. J., in 1952. His main job was to investigate the possibilities of using propane in internal combustion engines. He spent seven months on the investigation, and when it was completed, a special report was published titled "Propane Fueling of Fork Lift Trucks."

As a result of this study, Gerwick became so enthusiastic about the possibilities that he left and formed a company of his own, Standard Propane Corp., in New Jersey. The sole purpose of this new company was to make conversions.

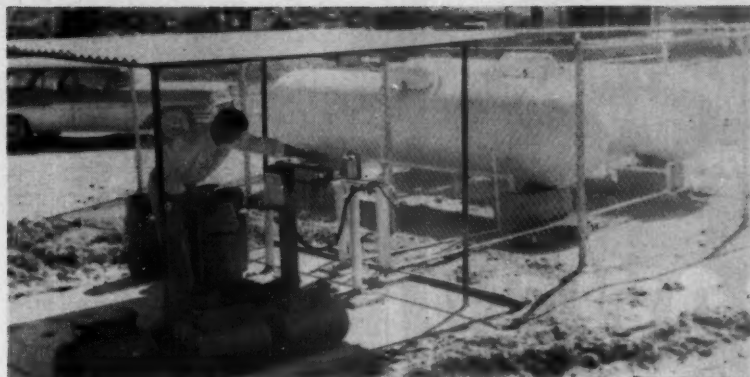
The conversion business is a lucrative one, but it didn't have the repeat business that makes for comfortable operating conditions. Gerwick wanted to start serving gas to some of the companies he had converted. But this would require more capital than he had, so he sold out to Suburban and rejoined the company instead.

Eventually, he had the urge again, so in September of 1955 he started Industrial Propane Corp. in Kenilworth, N. J. Once more he specialized in conversions, but he also added the delivery business he had wanted to carry on. He had no bulk plant, but filled his cylinders at Garden State Propane, in Parsippany, instead.

Worked with forklift dealers

Gerwick had a theory about how the forklift business should be built. He would work exclusively with forklift dealers in soliciting his conversion business.

At first blush, it might seem that these men would have little interest in promoting one fuel against another. But the nucleus of a demand was already in formation. A dealer would naturally want to be able to supply this demand; yet only a handful of trucks were coming from the factory already equipped to burn LPG. To capitalize on the demand, he needed to be able to promise



Gerwick engineers and packages the installation complete. Once the forklift load is secured, he builds demand by adding other plant usages and feeding them from the bulk tanks.

immediate delivery of a converted model. This Gerwick could supply.

Too, it gave dealers a positive advantage as well as a defensive one. LPG was something new, and it gave their salesman an advantage to play up. It also gave them the sort of foot-in-the-door conversation piece that is so necessary in making repeat sales. Thereby, they could keep in contact with customers, and through

such contacts could learn of a customer's new requirements.

Even today, according to Gerwick, only about 20 per cent of all the forklift trucks coming from the factory are factory-equipped to burn LPG. So there is still quite a market for a conversion expert who can give 24- or 48-hour service in making a changeover.

Gerwick, therefore, has worked

very closely with distributors for all the leading makes of forklift trucks. He has helped them, and they in turn have helped him by giving him a lot of leads.

Moved to bulk storage

Gerwick's theories have paid off well. Both his conversion and his gas business grew rapidly; and at the end of two years, it was obvious that he was ready for his own bulk storage. In March 1958, he commissioned Leo Zuckerman of Garden State to design a plant layout for him, and set up a 10,000-gal. tank complete with filling facilities. Now, selling gas at a rate approaching one million gal., he is about ready to add another 10,000-gal. tank.

Meanwhile, the emphasis has swung so far away from conversions toward gas deliveries that Gerwick has split off the latter business and started another company, Industrial Propane Equipment Co., Inc., which he set up in Fairview, N. J., some miles north. The company is headed up by Philip Berkley, who came to Ger-

You'll close more appliance sales

When you use this handy

COMPETITIVE COST CALCULATOR

Now . . . with this authoritative, convincing sales tool, you can prove to your prospects *quickly, easily and simply* that LPG costs less than electricity for cooking and water heating. Money talks with most people, so *dramatize the savings* with a Competitive Cost Calculator.

Compares the average annual cost of operating LPG versus electrical appliances, using your own local rates.

Proves to your customers' satisfaction that it's less expensive to cook and heat water with LPG than with electricity.

It's authoritative! Average annual usage figures for both LPG and electricity are taken from Technical Bulletin 1073 prepared by the U. S. Department of Agriculture.

It will last for years. Made from durable plastic-laminated board.



LPG OPERATORS—

The Competitive Cost Calculator builds fuel sales as it builds appliance sales. Hundreds of LPG appliance salesmen are using the Calculator to add authority to their sales presentations. Be sure each of your salesmen has one with him on every call.

\$1.00 each

Orders of 50 to 99—80¢ ea.

Orders of 100 or more—70¢ ea.

(In California add 4% Sales Tax)

The supply is limited, so order today!

BUTANE-PROPANE News • 198 S. Alvarado Street, Los Angeles 57, Calif.

CENTURY **LP** MEANS MORE * **LIFT POWER**



ONLY CENTURY LP-CARBURETION SYSTEMS OFFER ALL THESE FEATURES:

- * Maintains efficiency in idling... Assures constant operation
- * Exclusive triple action filtering with chamois-felt-screen system
- * Easiest to install
- * Exclusive sealed roller bearings on throttle shaft. Guarantees extra long use
- * Exclusive Century fuel metering valve carburetor.
- * Quick starting

Ask The Man From Century
... for installation tips
... on the spot service.

CENTURY gives you more
power... more efficiency.



CENTURY
LP-GAS CARBURETION



CENTURY GAS EQUIPMENT
Marvel-Schebler Products Div.
Borg-Warner Corporation
Decatur, Illinois

wick from Clark Forklift Co. This company is now converting about 20 vehicles a month.

Putting customers on bulk

Now Gerwick is looking more and more toward converting his customers to bulk storage. He has engineered a "packaged" bulk tank set-up which consists of either one, two, or three 1000-gal. tanks completely enclosed with a fence, all the necessary piping, and a complete filling station including scales for weighing the bottles and the entire assembly. He is promoting this on a basis of a 9 cent-per-gal. saving to the user. Buying it in bottles, they pay Gerwick 26 cents, but buying it in bulk they can get it for 17.

This is a good deal for the user. Consider the case of one of the typical early converts to bulk storage, The Valentine Fire-Brick Co. Valentine has two 1000-gal. tanks. These serve five forklift trucks which have already been converted. The company has seven or eight front-end loaders, which also will be converted. As soon as this work is completed, it is estimated the company will use 3000 gal. of LPG per month. On a 15-day delivery interval, Valentine will take about 1500 gal. per drop. If the company uses 3000 gal. per month, the difference between 26 cents and the 17 cents per gal. would amount to \$270. The only offsetting extra cost involved to Valentine is a \$40-per-month rental, which is set up on a three-year contract.

This sort of conversion will cut Gerwick's deliveries down to the bone. Instead of having to make a delivery once, twice, or possibly even three times a week, he will make just two deliveries per month. This is a logical step for him to take since it moves him toward the goal of more and more volume at less and less mark-up.

These installations cost Gerwick an average of \$2500 apiece. If they earn an average of \$480 a year, he's coming out with about a 19 per cent return on his money, not considering depreciation. On a ten year write-off, he would still be making close to 10 per cent a year on this equipment—not including what he's making on the gas.

NOW YOU GET Western Tank QUALITY at the HOTTEST PRICES!

All standard tanks now in stock for direct shipment to dealers.

John Deere "G"

Dealer Price
Was 102.72

Now 69.75

Farmall M
Standard

Dealer price
was \$92.77

Now \$67.10

You can make
savings on
all Western
Tanks, similar
to the two
listed here.

Close tolerances that mean a perfect fit everytime, are just part of the superior quality which you now get, at lower prices than ever before, when you order a Western Tank.

Western

MOTOR FUEL & TRACTOR TANKS

WESTERN TANK AND STEEL CORP.

LUBBOCK OKLAHOMA CITY KANSAS CITY, MO.

MAIL TODAY for complete price list.

Western Tank & Steel

Box 1338

Lubbock, Texas

NAME: _____

ADDRESS: _____

for long wear
low vibration
fast pick-up

JOHNSON VANASIL PISTONS



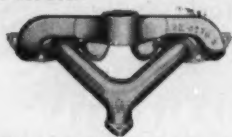
JOHN DEERE
Vanasil or
Aluminum
Pistons—jump
power output
as much as
25%

**MINNEAPOLIS-
MOLINE**
"U" Vanasil
Pistons—light-
weight, yet tough
as cast iron



LP conversions of John Deere and MM-"U" tractors result in more power and performance with Johnson Vanasil Pistons. Newly patented Vanasil amazingly combines the hardness of cast iron with the lightness of aluminum. Precision Johnson machining and engine "know-how" keeps pistons snug without sticking. Tractor vibration is kept low... stalling eliminated... pick-up increased.

For John Deere A, G, "50", "60" and "70"... also Minneapolis-Moline "U". Johnson Aluminum Pistons are available for John Deere A, B, D, G and H models



JOHNSON COLD MANIFOLDS FOR LP GAS keep constant flow at correct temperatures... are available for:

John Deere A, B, D, G
International H, M, W-9
Allis-Chalmers W, WC, WD, WF
Ford 600, 700, 800, 900 Series
—also International and Chevrolet trucks.

WRITE for literature and prices.

JOHNSON MACHINE SHOP

DEPT. B-27

PONTIAC, ILL.

Shirt-tail loads

But this set-up has a collateral advantage. Heretofore, Gerwick has confined himself to the industrial engine market. So if there were other relatively small uses for LPG in the plant, they were served by some other dealer. Now Gerwick comes in with 1000 gal. or more of storage and it's not going to cost the customer any more to have Industrial Propane hook up the other LPG-burning equipment. These will be gravy for him, and gravy for Gerwick as well.

Thus, Valentine Fire Brick, for example, which uses 100-lb cylinders full of gas for a certain industrial furnace uses, can put these furnaces on the bulk tank and take advantage of the 17 cent rate—a much lower rate than is now being paid to some other dealer. This is the kind of coat-tail business that is looking so lucrative right now to Gerwick.

Another example of how this is working out is an installation at a paper board box company in the area. When Industrial Propane set up the bulk plant, another LPG company was supplying gas which is used for cooking in the cafeteria. The price came out at about 30 cents per gal.

When Gerwick moved in with his bulk plants, he was able to take over this additional load by snipping about 13 cents off the price of the gas.

Lots of possibilities

This market has lots of possibilities, even among Industrial Propane's present customers. Today Gerwick has more than 200 of them, and he estimates that about one-third have a usage that's high enough to warrant their going to the bulk stock. Presently, he can't serve bulk users because he has no bulk trucks, and he has to job this delivery business out to Garden State. However, he is building himself up for a bulk business, and one of these days will go into it and will take over these deliveries himself.

Meantime, of course, both he and Garden State are benefiting from the arrangement. Gerwick doesn't want to handle any commercial or domestic accounts, so

he throws these to Garden State whenever possible. Garden State, on the other hand, is not in the conversion business, so it passes these leads on to Gerwick.

It is the build-up in the load (to 1 million gal.) that has persuaded Gerwick to break off the conversion business, and set up an entirely separate operation for it. It is also making him very conscious of the need for cutting down on deliveries as much as possible. That's why he is stressing the bulk business.

Where's the breaking point for going to bulk? Gerwick figures that most of the vehicles used by his customers average out at about 80 gal. per month. Therefore, if a customer had a dozen of them, you could bank on a load close to 1000 gal. per month. On the other hand, by being able to provide the LPG in bulk, you'd be able to serve front-end loaders and other types of equipment on the premises, so you could settle for a half-dozen forklift trucks and still make the bulk installation well worth while. Such is the case with Valentine Fire Brick.

Future unlimited

One might inquire how long this solid growth can continue for Industrial Propane. From Dick Gerwick's viewpoint, it's practically limitless. There are, he figures, probably 14,000 to 15,000 forklift trucks in the 30-mile radius in which his company operates. So far he has only about 5 per cent of this business; yet he believes he is number one in the area. If the other companies are taking 2 or 3 per cent of the market, this would still leave more than 90 per cent yet to be tapped.

It's an excellent opportunity for a company that, like Gerwick, wishes to specialize. And he's going to continue to specialize for a long time, that's evident. His whole operation is geared for the forklift business. His billing procedures, his routing and scheduling, his field buying policies, his virtual one-to-one summer-to-winter ratio—all these factors contributed to his decision to hold the operation on the single track. He's standardized on a bulk installation, he's standardized on certain

fittings and certain pipings. His invoices are all made up in a particular fashion for this type of business. Service is relatively easy, since he doesn't have to worry about half a dozen different kinds of appliances.

He's working with companies of sizes large enough that their usage is sufficient to make it worth while to watch prices. On the other hand, he's not working in the area of carload lot deliveries, so he has no competition from the refiners. His equipment, too, is designed for this type of business. He's built his own unique delivery truck bodies for fast cylinder flow.

Then too, Gerwick is able to specialize in the service he is giving. Service is what he's selling more than any other one thing. The better he can do it, the happier his customers will be; and the happier they are, the faster his company will grow. And as it grows, it'll keep its eye on the one target, which is a pretty good target, according to Dick Gerwick. ■

CTA purchases another 100 odorless propane buses

The Chicago Transit Authority board recently authorized purchase of another group of 100 odorless propane buses from the Twin Coach Co. of Kent, Ohio, and the Flxible Co. of Loudonville, Ohio, joint manufacturers, at a total cost of \$2,177,180.

The new buses, each having a capacity of 44 seated passengers, are to be equipped with the latest type of air springs as well as with power steering. In-service buses now at or over retirement age will be replaced as the 100 new buses arrive. Delivery is expected to be completed by October 1959.

Presently Twin Coach-Flxible are delivering a previous order of 150 propane buses which were purchased some months ago on competitive bidding. To date approximately 100 of these buses have been delivered.

RUSKIN SAID IT A CENTURY AGO

Nothing has ever been made that someone else could not make worse and sell for less, and those who consider price alone are this man's lawful prey.

Any man can look good in a good job, but it takes a good man to look good in any job.

Talent is something that anyone may develop. It is only a driving enthusiasm that leads one to acquire and apply specialized knowledge.



THE ORIGINAL AIR CLEANER ADAPTER

Often copied but never equaled — the J&S ORIGINAL Air Cleaner with built-in Adapter leads the field. Bolts right on top of dual and four-barrel carburetors. Especially designed for automotive and truck conversions where the gasoline carburetor is retained on the engine. Quick, easy installation — no special tools required. Available for single, dual and 4-barrel carburetors.

NO MOVING PARTS

Dependable — economical — and trouble-free. No moving parts to wear out. Guaranteed for long service.

Lowest Prices

4-BARREL **\$38.40**

Plus Excise Tax

SINGLE and DUAL **\$33.40**

CARBURETORS.....

Plus Excise Tax



NO GOOSENECK

The thin design of the J&S Air Cleaner Adapter permits installation directly on the carburetors, leaving sufficient room under the low hoods of today's modern cars. Not necessary to add an expensive and awkward gooseneck.



NO HOLES TO DRILL

A wrench and screwdriver are the only tools required for quick, easy installation. The carburetor is not taken off or modified in any way.



J&S CARBURETOR COMPANY
P. O. BOX 10191 DALLAS 7, TEXAS
"LP GAS CARBURETION SINCE 1934"



Parkhill Nozzles lock on and open fuel valves in 3 seconds... On release, automatically vent away from hands.

Two sizes: Domestic 7" Truck 11" overall.



Safety Hose Nozzles

1. Long Life
2. Steel-Ductile Iron
3. Easy to Repair
4. Safe

Write for Information

PARKHILL-WADE

2264 Huntington Drive, San Marino, Calif.



CLASSIFIED Advertising

All Classified Advertising payable with order. Copy must reach publisher's office prior to the 1st of the month preceding publication. Address: Classified Advertising Materials, BUTANE-PROPANE News, 198 So. Alvarado Street, Los Angeles 57, Calif.

DISPLAY CLASSIFIED

\$12.00 a column inch per issue. Choice of 18, 14, 12, 10 pt. display type for headings. Set with 1 pt. border. Maximum ad size 3". No cuts permitted. Publisher will set ad for maximum effect in space purchased.

UNDISPLAYED CLASSIFIED 15¢ a word. Set in 6 pt. type without border. \$3.00 minimum charge per insertion. If Blind Box number card of B-P News is used, count as five words.

POSITION WANTED. Undisplayed rate is one half of above rate, payable in advance.

DISCOUNT OF 10% if full payment is made in advance for four consecutive insertions of undisplayed ads.

SITUATIONS WANTED

POSITION WANTED: OVER TEN YEARS' experience in domestic bulk, cylinder, and gas appliance selling, installation and service. Both LPG and natural gas equipment. Reply Box 3, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

POSITION WANTED WITH PROGRESSIVE LP-GAS Company. Desire position as manager or assistant with growing company. Nine years' experience in service relations, sales promotion, and administration. Seek position offering great challenge and opportunity. Reply Box 4, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

POSITION WANTED: AGE 45, AGGRESSIVE, well seasoned, qualified by ability and a broad LPG experience of 12 years in management, LPG producer representative, sales promotion and service relations. Thorough knowledge of appliances, heating, etc., both wholesale and retail. Require salary, plus. Prefer Midwest. Reply Box 8, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

HELP WANTED

EXPERIENCED LP GAS CARBURETION man to sell and install all types of conversions. Give age, experience, references and salary desired. Reply Box 6, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

AGGRESSIVE SALES REPRESENTATIVES

IN MIDDLE WEST, NORTH CENTRAL STATES AND SOUTHERN STATES for LPG and NH3 Storage and System sales. Free to travel. Previous sales experience and knowledge of L.P. Gas industry helpful. State complete background and sales experience to application to: Manager, LPG & NH3 Equipment Sales Division.

The J. B. BEARD CO., Inc.
P. O. Box 1115, Shreveport, La.

BUSINESS OPPORTUNITIES WANTED

WANTED TO BUY: PROPANE PLANTS Upper Mid-West, also used tanks 100# to 30,000 gallon size. Reply Box 99, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

BUSINESS OPPORTUNITIES OFFERED

LPG BULK PLANTS. WE SPECIALIZE in selling petroleum properties throughout Midwest. Have number desirable plants for sale. OLE BRODD, PETROLEUM MARKETERS, 605 Produce Bank Bldg., Minneapolis, Minnesota.

FOR SALE: L P GAS BUSINESS ON FLORIDA West Gulf Coast. Thirty miles north of St. Petersburg. On Highway 19. Good location in fast growing community. Doing approximately 50,000 gal. with 6,000 gal. storage. Smith pump. Two scales. Two trucks. Approximately 380 cylinder customers. This is a good sound business with plenty room for expansion. Appliance sales good, and fine opportunity for plumber and electrician. No unfair competition. Reason for selling, retiring. \$16,000 plus inventory and you can lease or buy property with terms to suit. If interested see it or contact owner, R. W. Hicks, Route 1, Box 330, New Port Richey, Florida. Phone 6446.

BUSINESS OPP. OFFERED—Cont.

FOR SALE—TWO LP GAS COMPANIES in Illinois. Total cash earnings \$82,000.00 annually. Cash earnings after taxes will retire purchase price in 6½ years. Total gallons 2,467,277. Equipment and plants are completely modern. Down payment for both companies \$155,000. Can be purchased separately. Federated Petroleum, Mel Putnam, 3228 University, Madison, Wis.

BUSINESS FOR SALE

- Bottle Gas Franchise—630 Customers
- Launderette—15 Washers—3 Dryers
- Coleman—Heating Franchise
- Appliances—Norge
- Roof Coating—Franchise
- 2 Trucks
- Inventory
- All Accounts Receivable
- Store has 40' Front—Good Lease
- Price—Only \$14,500.00

Must sell at once—Good Reason

FRED CHAPMAN

LOCK HAVEN, PA.

FOR SALE — TRUCKS - TRAILERS

HAUL MORE PROPANE AND LESS STEEL! LOAD AND UNLOAD FASTER! Save the annual Federal tax on trucks that weigh more than 13,000 lbs! Users praise the Nor-Tex 2500 WG Single Barrel Payload Special of 202B X-rayed material and stress relieved. Weighs only 12,890 lbs. completely equipped with High Flow Plumbing, Meter, Hose, Hose Reel, Fire Extinguisher and mounted on cab-forward truck with 108" cab to axle dimension. Increased capacity pump boosts deliveries to 50 GPM. Vapor manifold permits easy simultaneous loading and unloading of twin tanks with either compressor or liquid pump. These popular, carefully engineered and sleek designed Nor-Tex Single and Twin units are produced in four attractive models: The "Standard"—the "Custom"—the payload "Special" and the "DeLuxe." That's not all! Twin units, up to 2000 WG, are mounted on 85" cab to axle. Start hauling more gas and less steel. Do it profitably and in much less time. Phone, wire or write for prices now. NORTH TEXAS TANK CO., Denton, Texas. Phone DUpont 2-5416.

TRANSPORTS: SINGLE OR TWIN barrel; new or used; for lease, or sale on budget or rental sale plan. If you want maximum payload, with all of the latest equipment engineered to fit your truck, roads, and your hauling problem, get the LMC PAYLOADER

Contact Lubbock Machine & Supply Co., Inc., Drawer 1589, Lubbock, Texas

TRINITY BULK TRUCK UNITS

In Stock—Immediate delivery Twin 1400 through 2450 WG your chassis or ours.

There's more cold weather ahead . . . call, write or wire: RAY REEDY

TRINITY STEEL CO., INC.

DALLAS, TEXAS PHONE FL 7-3981

FOR SALE—TRUCKS - TRAILERS - Cont.

USED PROPANE DELIVERY TRUCKS, 1200 GALLONS W.C. Presently in use and being replaced with larger units. United Petroleum Gas Co., 4820 Excelsior Blvd., Minneapolis 16, Minnesota.

PROPANE DELIVERY UNIT—1955 Model Ford F-600 with 1200 gallon tank, Corken pump, 50' 1" delivery hose, L.P.G. Carb. Separate Fuel Tank, good 8:25 x 20 tires, 20 Lb. Fire Extinguisher. This Unit is ready to go to work immediately. Must see to appreciate. Only \$2800.00. Northern Oklahoma Butane Co., Box 309, Perry Oklahoma.

FOR SALE—USED PROPANE DELIVERY TRUCKS—Ready for service. 1,200 to 1,800 W.G. Financing available. Also New Trucks. Write for list of units and prices. McNAMAR AND CROWLEY, INC., Box 210, Salem, Illinois.

FOR SALE: USED PROPANE TRANSPORT, 6700 water capacity twin barrel. Perfect condition. New drums and lining, complete new torsion suspension and good rubber. Legal in all Western States. Will finance to right party. \$4750.00. Utah Colorado Gas Company, Box 348, Vernal, Utah.

FOR SALE: TWO LATE MODEL BUTLER single barrel Propane transports, 6608 W.C., Reyco tandems, with or without 205 International tractors. Excellent condition, ready to haul gas. Write or call Dixie Gas, Inc., Marks, Miss.

USED BUTANE TRANSPORT, 5090 gallon net water gallon capacity—good rubber—new GMC engine ready to go. \$3500.00. Reply Box 7, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

TRANSPORTS—TWIN BARREL. 1—4228 WG, 1—3400 WG. Good rubber. Priced to sell. Mi-Gas Co., New Haven, Kentucky. Phone LI 9-3317.

WE SAVE YOU MONEY LOOK at this typical SPECIAL

BRAND NEW 1959 Chev. 2 ton with 1800 gal. twin propane tanks, PIPED COMPLETE with Viking pump, Neptune Printer Meter, 20# fire ext., 75' each filler & vapor hoses, ICC lights, full size rear cabinet & controls, READY TO USE—ONLY—

\$636.00 Down and 36 payments of \$181.45 including interest.

You SAVE over \$1,000.00 by buying instead of leasing. Other sizes (1400-2200 WG) & other makes new trucks (at FLEET PRICES) available. WE TRADE. We have USED TRUCKS & TANKS also. Call me anytime.

Preston Grace

WHITE RIVER DISTRIBUTORS

Ph. 570—Batesville, Ark.

CLASSIFIED Advertising



FOR SALE—TRUCKS - TRAILERS - Cont.

NEED A NEW OR USED PROPANE BULK TRUCK?

Why don't you call a man who KNOWS trucks, likes to TRADE, makes quick delivery, has EASY TERMS, appreciates your business, and SAVES YOU MONEY. All sizes in stock. Hundreds of SATISFIED CUSTOMERS the World Over.

Preston Grace
WHITE RIVER DISTRIBUTORS
Ph. 570—Batesville, Ark.

DELIVERY UNITS: SINGLE OR Twin Barrel. Our prices are competitive. We invite comparison between the equipment and price on our units with any competitive units. We believe we can give you the highest payloads per pound of gross vehicle weight. Write, wire, or phone.
Lubbock Machine & Supply Co., Inc.
Drawer 1589, Lubbock, Texas.

TRADE WITH A TRADER! NEW & USED PROPANE TRUCKS

I'll trade with you on the phone! My ONE MAN SALES FORCE (myself) SAVES you the usual 10% sales commission, eliminates any mix-up on order, delivery date, financing, etc., yet this year, as in every year for past 10 years, I SELL MORE tank trucks than anyone else. If you have a trade-in, send me photo and description. Used and NEW units (1400-2200 WG) in stock for delivery NOW. EASY TERMS—(10% Down—36 Mos. on balance—I carry my own paper). DON'T BUY OR LEASE a unit until you CALL ME—Day or night. WHO AM I?

Preston Grace—Ph. 570
WHITE RIVER DISTRIBUTORS
Batesville, Arkansas

FOR SALE—TANKS - CYLINDERS

SKID TANKS — IN STOCK NOW —

3000 gallon size built especially rugged for oil field use. Write, wire or phone
Lubbock Machine & Supply Co., Inc.
P. O. Drawer 1589
Lubbock, Texas

WE'LL HELP YOU (Financing and Installation)

PROPANE STORAGE PLANTS . . . 6,000-12,000-18,000 and 30,000 any location except West Coast. We'll sell, lease or rent. Immediate action! Remember, we'll finance for you. If interested

Write Box 9, BUTANE-PROPANE NEWS
198 So. Alvarado St., Los Angeles 57, Calif

FOR SALE—TANKS-CYLS—Cont.

GOOD USED 100# PROPANE cylinders and double manifold regulators and housings, Rego and Fishers. Reply Box 5, BUTANE-PROPANE NEWS, 198 So. Alvarado St., Los Angeles 57, Calif.

NOW—IMMEDIATE DELIVERY

250# WP Propane Storage Tanks, 1000 thru 3380 gallon 46" diameter, 2180 thru 7880 gallon 60" diameter, 9050 thru 16,800 gallon 84" diameter. Phone, write, wire, blueprints furnished.

Ray Reedy, Trinity Steel Company
Dallas, Texas Phone FL 7-3961.

FOR RENT or LEASE

6,000 to 18,000 GALLON PROPANE STORAGE for rent or lease. Reply Box 776, Tulsa, Oklahoma.

FOR SALE—MISCELLANEOUS

DIXIE SEMI-LOCK HOODS, ALUMINUM and Aluminum coated steel. Wall bracket or free standing. GUARANTEED mechanically for life. \$3.00 up. Dixie Manufacturing Company, Elizabethtown, Kentucky, Box 65. Phone Collect RO-5-9229.

FOR SALE—IMMEDIATE DELIVERY! Eureka Smokehouse Burner Assemblies! For meat smoke houses using bottled gas. Completely automatic. Clean filtered smoke. Distributes heat uniformly. Low gas consumption. Automatic temperature and pilot control. Less product shrinkage. Easily installed. Write for descriptive pamphlet. Eureka Equipment Company, P.O. Box 396, Beloit, Wisconsin.

DECALS MADE FOR TRUCKS, EQUIPMENT. Small or large quantities. Catalog free. Mathews Co., 827 S. Harvey, Oak Park, Ill.

BAKER ALCOHOL PUMPS. The sure cure for Moisture problems. Hydraulically designed to pump alcohol into propane filled cylinders. A must for every LP Gas Dealer. Send \$59.95 for pump complete with fittings. Baker Engineering, Malone, N. Y.

SERVEL GAS REFRIGERATORS

4 to 8 cu. ft. Used Good Condition
Some with top freezers
Send for Prices

FRED A. BROWN COMPANY
170 W. Cumberland St., Philadelphia 33, Pa.
REgent 9-1130 Est'd 1918

SERVEL GAS REFRIGERATORS

with Cross-the-Top Freezers
Model S600A 6 cu. ft.

Used: Guaranteed in good operating order. Excellent condition. Low delivery cost anywhere. Send for illustrated folder NOW.

BEACH REFRIGERATOR CO.

196-11 Northern Blvd. Flushing 58, N. Y.
Phone Flushing 7-6161

PROFESSIONAL SERVICES

INDIVIDUALLY DESIGNED Ammonia and LP Gas Plants

H. Emerson Thomas
& Assoc., Inc.
Westfield, N. J.

LET MY 30 YEARS OF PRACTICAL "LP" experience assure you maximum profits. Equipment revisions, property evaluations for sales or refinancing, and assistance on legal suits also supplied. Floyd F. Campbell, Management Counselor, 821 Crofton Ave., Webster Groves, Mo.

PROPANE GAS PLANTS

ANHYDROUS AMMONIA PLANTS

Designed and Installed
PEACOCK CORPORATION
Box 248, Westfield, N. J.

L. P. GAS INSURANCE

Have your agent write us about our Complete and Comprehensive Coverage for Adequate Limits of Liability at Reasonable and Normal Rates with Specialized Safety Engineering and Claim Service. Available only in Alabama, Arkansas, Arizona, Florida, Georgia, Kansas, Louisiana, Mississippi, New Mexico, Oklahoma and Texas.

PAN AMERICAN FIRE & CASUALTY COMPANY
Earl W. Gammage, President
P. O. Box 1462 Houston, Texas

BUSINESS RECORDS

BUSINESS RECORD FORMS. ALL-WEATHER EZE-SNAP delivery invoices, for use when making LP gas metered truck deliveries. 1000 sets (3 part) imprinted with name, address and telephone. \$18.00 per 1000 sets. Advise make of meter. DEGREE DAY SYSTEMS, Dept. BP WOODSIDE 77, L. I., N. Y.

SERVING 20,000 PETROLEUM COMPANIES over 30 years with petroleum price cards, customer reminder Eze-Stik labels, telephone call—service order—L/P metered delivery invoices, Eze-Snap Service Form, Duraluminum ticket holders, Sort-O-Matic Rack, etc. Write us for details, no obligation. DEGREE DAY SYSTEMS, Dept. BP., WOODSIDE 77, NEW YORK.

HOW TO FIND A BUYER

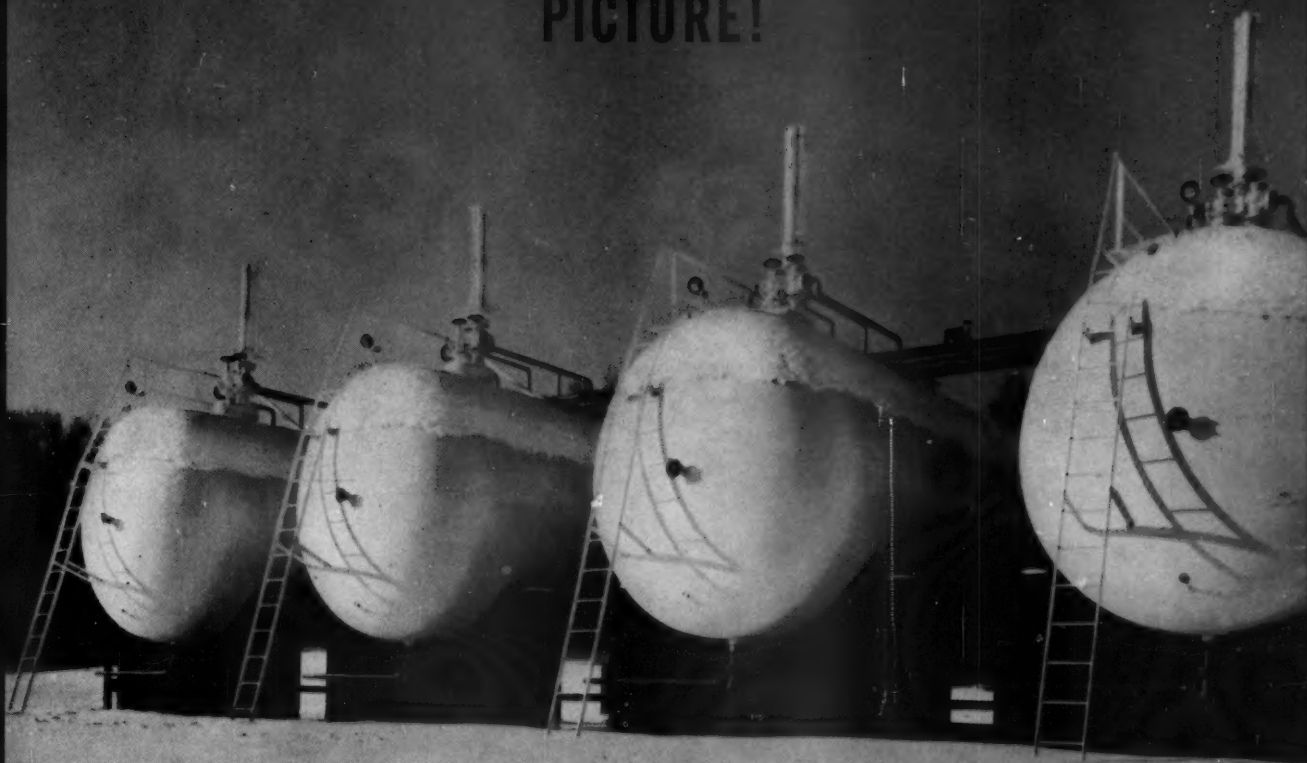
You can do it quickly, inexpensively with a classified ad in BUTANE-PROPANE NEWS.

Advertisers

*These advertisers carry additional information on their products in the 1958 Butane-Propane Catalog.

*ACF Industries, Inc.	Third Cover	Fine Products Co.	—	Parkhill-Wade	87
*Aluminum & Brass Co.	59	*Fisher Governor Co.	4, 5	*Pasley Mfg. & Dist. Co.	71
*American Liquid Gas Corp.	—	Flint Steel Corp.	—	Peerless Mfg. Div. of Dover Corp.	—
*American Meter Co., Inc.	11	Ford Motor Co.	40, 41	Phillips & Buttorff Corp.	69
Anchor Petroleum Co.	45			Phillips Petroleum Co.	—
Anco Mfg. & Supply Co.	—			Powell Co., The	—
Anderson & Forrester	—	*General Gas Light Co.	—	*Pressed Steel Tank Co.	Second Cover
Arps Corporation	76	General Processing Corp.	65		
		Grayson Controls Div.	—	Radiator Specialty Co.	80
		Robertshaw-Fulton Controls Co.	—	Reznor Mfg. Co.	12
		Griffiths, E. F., Co.	—	Richardson Gasoline Co., Sld	43
				Ridge Tool Co.	13
Baso, Inc.	—	Hannay & Sons, Inc., Clifford B.	56	Robertshaw-Fulton Controls Co.	—
*Bastian-Blessing Co., Inc.	18	*Hansen Mfg. Co.	10	Grayson Controls Div.	—
Beacon Petroleum Co.	—	*Hardwick Stove Co.	15	Rochester Gauges, Inc.	—
Beard Co., Inc., The J. B.	—	Harper-Wyman Co.	2	*Rockwell Mfg. Co.	1
*Beam Products Mfg. Co.	—	*Hones, Chas. A., Inc.	—	P & I Meter Div.	—
*Bendix Aviation Corp.	—				
Zenith Carburetor Div.	—			Samuel Stamping & Enameling Co.	—
Betts Machine Co.	—			*Selwyn-Pacific Co.	—
Blackmer Pump Co.	79	J & S Carburetor Co.	87	Sheffield Bronze Paint Corp.	—
BPN Reprints	69	*Johnson Gas Appliance Co.	12	Shell Oil Company	77
Brake Manufacturers, Inc.	—	Johnson Machine Shop.	85	Siegler Heater Co.	—
Brown Stove Works	75			*Sinclair Oil & Gas Co.	66
Brunner Div., Dunham-Bush Co., Inc.	—			*Smith Precision Products Co.	—
		Kosangas, Denmark	—	*Sprague Meter Co.	—
				Squibb-Taylor, Inc.	—
*Century Gas Equipment	—	*Linde Co., Div. of Union Carbide Corp.	57	Stewart-Warner Corp.	67
Marvel-Schebler Prods. Div.	84	Little, H. C., Burner Co.	78	Suburban Appliance Corp.	70
Chattanooga Royal Co.	—	Locke Stove Co.	—		
*Cities Service Oil Co.	—	Long Tank Co.	—	Temco, Inc.	53
*Columbian Steel Tank Co.	—	Lubbock Machine & Supply Co.	16	Texas Company, The	51
Corken's Inc.	—			*Texas Natural Gasoline Corp.	—
Cost Calculator	83	Madden Brass Prods. Co.	—	Trinity Steel Co., Inc.	Fourth Cover
Cribben & Sexton Co.	61	Magic Chef, Inc.	—	Tuloma Gas Products Co.	Front Cover
Crown Stove Co.	—	Marvel-Schebler Prods. Div., Century Gas	—		
		Equip.	84	*Union Carbide Corp., Linde Co. Div.	57
Dal-Worth Tank Co.	—	Master Tank & Welding Co.	55		
Davis Engineering Corp.	68	Minneapolis-Honeywell Regulator Co.	—	*Viking Pump Co.	64
Dearborn Stove Co.	—	Appliance Controls Div.	—		
*Delta Tank Mfg. Co.	—	Water Heater Controls Div.	—	Waldorf Heater Co.	80
Dixon Valve & Coupling Co.	65	Mississippi Tank Co.	63	Wallace, William, Co.	—
Drake & Townsend, Inc.	—	Motorola Comm. & Electronics, Inc.	—	Metalbestos Div.	—
Dunham-Bush Co., Inc., Brunner Div.	—			*Warren Petroleum Corp.	8
		*Neptune Meter Co.	—	*Weatherhead Co., The	62
		Norco, Inc.	—	Western Tank & Steel Corp.	85
Elgin Softener Corp.	—	*North Texas Tank Co.	6, 7	Whitehead Mfg. Corp., D. W.	—
Ellis, Geo. D., & Sons	—				
Ellis Manifold Co.	—			*Zenith Carburetor Div.	—
Empire Stove Co.	—	Ohio Foundry & Mfg. Co.	49	Bendix Aviation Corp.	—
*Ensign Carburetor Co.	—				

PRETTY AS A PICTURE!



Battle Creek Gas Company, Battle Creek, Michigan

LPG is a clean, neat fuel...and this gleaming, snow-white storage installation reflects that quality. These **ACF** tanks look clean and *stay* clean because we steel-grit-blast them before the prime coat of paint.

The attractive appearance of **ACF** tanks adds to a company's reputation...and *it saves money*. The paint you put on stays on, and stays good looking, for a long, long time without repainting.

You save on the first painting, too, because they're ready for painting when you get them. No need to weather them for a year and then prepare them.

Last but not least, we steel-grit-blast the inside as well, to clean off all the mill scale and minimize your maintenance problems!

Grit-blasted surface is only one of all the **ACF** features, to be sure. Others include stress-relieving...complete x-ray inspection of all seams (including manway seams) ...unique one-piece Flued Manway...prices right in line with ordinary tanks...prompt delivery in all sizes of tank from 2400 gallons to 74,000 gallons capacity.

Call your nearest **ACF** sales office: they'll be glad to give you all the information or technical advice you want.

acf

AMERICAN CAR AND FOUNDRY

DIVISION OF ACF INDUSTRIES, INCORPORATED
750 THIRD AVENUE, NEW YORK 17, N. Y.

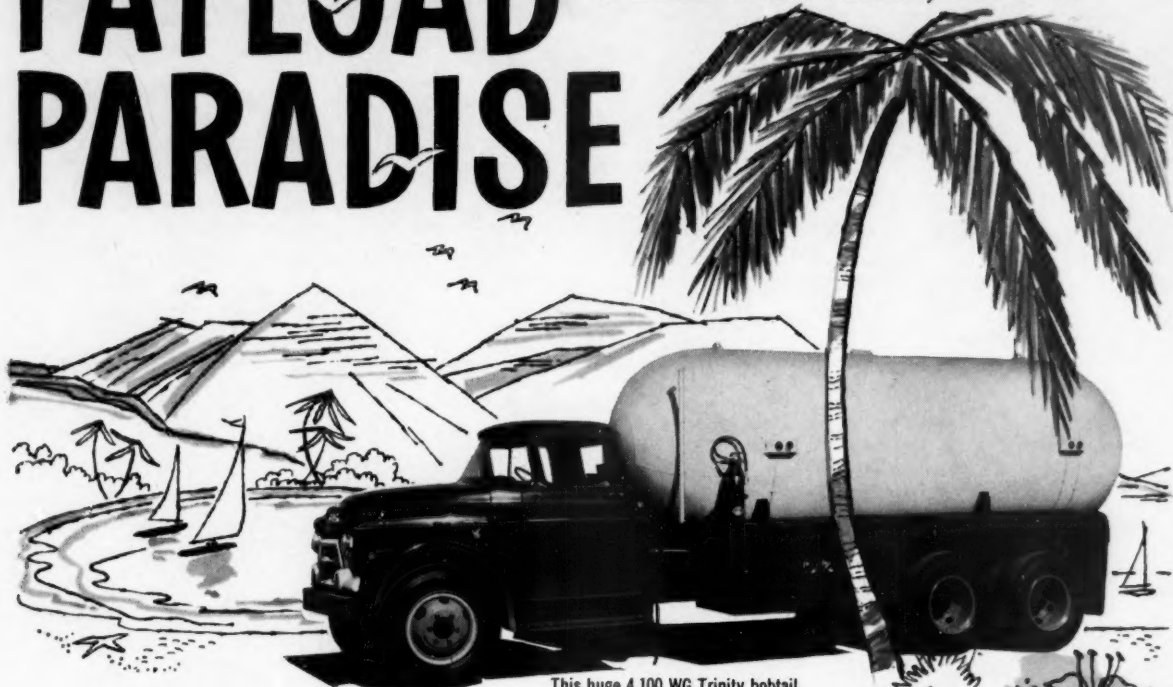
Storage Tanks for propane, chlorine,
refrigerant gases—Propane Transports—
Chemical Transports—Safety Valves.

SALES OFFICES: New York • Chicago • Cleveland • Washington, D. C. • Philadelphia • San Francisco • St. Louis • Berwick, Pa. • Huntington, W. Va.

Honolulu Gas Company knows . . .

PAYLOAD PARADISE

is IMPORTANT, even in



This huge 4,100 WG Trinity bobtail for Honolulu Gas Co. is probably the world's largest T-1 bobtail in operation.

Palms and pineapples don't alter the picture on profit. That's why Honolulu Gas chose Trinity's 4,100 WG capacity bobtail, fabricated with T-1. Through Trinity's engineering and T-1 steel you get the bonus in pay-load . . . more than 10% increase on every haul! Write, wire or phone TRINITY and discover how T-1 and Trinity's designing can put you in profit paradise.

Trinity Steel's recent merger with Dallas Tank Company has resulted in personnel and plant expansion that provides superior service in engineering and fabrication. Remember, Trinity Steel Company is Number One in the World in the manufacture of LPG fabricated from T-1 . . . the wonder steel!



TRINITY STEEL CO., INC.

4001 IRVING BLVD./DALLAS, TEXAS, U.S.A./PHONE Fleetwood 7-3961

*Latin American Division: Tanques de Acero, S. A. Calle Poniente
150 No. 734, Mexico, 16, D. F., Plant and Sales Office.*

